# A STUDY ON THE EFFECT OF SOCIAL MEDIA INFLUENCES ON BODY IMAGE PERCEPTION, EATING PERFORMANCE, AND AWARENESS OF NUTRITIONAL DEFICIENCIES AMONG ADOLESCENT GIRLS

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# CHAPTER-I

## INTRODUCTION:

Adolescence is the transitional period from childhood to adulthood, marked by the development of all aspects or functions needed to enter maturity. Adolescents are a group vulnerable to nutritional problems because they are still growing. During this phase, they experience a second rapid growth spurt, followed by a decline in physical growth as they transition into young adulthood. Therefore, adolescents require adequate nutrition not only in terms of quantity but also quality. (Ansar et al., 2024)

The more varied and diverse the food consumed, the better the chance of meeting their nutritional needs, which subsequently impacts their nutritional and health status. Meeting nutritional needs during adolescence is crucial due to the increased demand for nutrients to support growth and physical as well as mental development. According to the Indonesian Ministry of Health, common nutritional problems among adolescents today include anemia, stunting, chronic energy deficiency (CED), and overweight or obesity. (Ansar et al., 2024)

Nutritional issues during adolescence can have negative consequences, such as reduced concentration in learning, an increased risk of giving birth to low birth weight (LBW) babies, and declining health conditions. A lack of nutritional knowledge and poor body image perception can affect nutritional status. (Ansar et al., 2024)

According to Florence (2017), lower levels of knowledge are associated with poorer body image perceptions. Adolescents with limited nutritional knowledge are more likely to have either underweight or overweight status. Research by (Fajri et al. 2014) and Widianti and Candra (2012) indicates that female adolescents with negative body image are more likely to have poor or excessive nutritional status. Individuals with a negative body perception often feel their bodies are unattractive, experience shame, and lack confidence. This negative body image can influence a teenager's eating habits. (Ansar et al., 2024)

Nutritional knowledge refers to an individual's understanding of the balanced nutrition needed by the body to maintain optimal health. People with good nutritional knowledge are expected to have better nutrient intake. One of the causes of nutritional problems and shifts in eating habits during adolescence is a lack of nutritional knowledge. Nutritional knowledge and body image are key factors that influence eating behavior. (Ansar et al., 2024)

According to Fasli Jalal (2010), nutrition education is a continuous process aimed at increasing knowledge about nutrition, shaping healthy attitudes and behaviors by focusing on daily eating patterns and other factors affecting food, and improving a person's overall health and nutrition. The purpose of nutrition education is to encourage positive behavior changes related to food and nutrition. Social media platforms, such as Instagram and Facebook, are popular educational tools among adolescents. (Ansar et al., 2024)

The captivating audio-visual elements, including images, videos, and accompanying music, make these platforms particularly attractive to teenagers. Based on the description above, this study, through a quantitative approach, aims to determine the effect of social media-based nutrition education on adolescents' nutritional knowledge and body image perceptions. (Ansar et al., 2024)

In the digital age, social media has emerged as a central influence on adolescent development, shaping not only how young people communicate and form relationships but also how they perceive themselves and their bodies. With platforms such as Instagram, TikTok, and Snapchat increasingly integrated into teenagers' daily routines, visual content has become a dominant source of information about physical appearance, health ideals, and lifestyle norms. (Vincente-Benito et al., 2023)

Adolescents are especially susceptible to these influences because this period of life is marked by heightened self-awareness, identity formation, and sensitivity to social comparison. Exposure to curated and often idealized representations of bodies, lifestyles, and eating patterns can profoundly affect adolescents' body image perceptions and subsequent behaviours. Research indicates that the continual visibility of these idealized images on social media may contribute to unrealistic body expectations and dissatisfaction with one's own physical image, thereby triggering a cascade of psychological and behavioural outcomes. (Vincente-Benito et al., 2023)

Within the domain of body image research, multiple studies have documented a consistent association between intensive social media use and increased body dissatisfaction among adolescents and young adults. For example, a systematic review examining the impact of social media on body image and psychological well-being found that high levels of social media engagement were linked with negative self-evaluation, internalization of ideal beauty standards, and lower self-esteem among users aged 10–25 years. (Vincente-Benito et al., 2023)

Patterns of misuse and excessive consumption of social media content were identified as risk factors for body image concerns and risky eating behaviours, illustrating a complex interplay between digital media exposure and psychosocial outcomes in youth. (Vincente-Benito et al., 2023)

The mechanisms through which social media influences body image are multifaceted. One critical pathway is social comparison—the process by which individuals evaluate their own appearance relative to others. Adolescents frequently compare their bodies to the images they see in their feeds, many of which are enhanced, stylized, or filtered to reflect narrow cultural ideals of attractiveness. (Vincente-Benito et al., 2023)

This comparison often results in feelings of inadequacy or a belief that one's natural appearance is insufficient or unattractive. The continual reinforcement of these ideals may engender internalization of appearance norms, where individuals adopt externally defined standards as benchmarks for their own self-worth. Over time, this internalization can become deeply internalized, affecting cognitive and emotional functioning beyond mere visual exposure. (Vincente-Benito et al., 2023)

In addition to body dissatisfaction, research has shown that social media influences eating behaviours and dietary practices among adolescents. A growing body of evidence suggests that social platforms not only shape perceptions of ideal body types but also actively promote certain eating patterns and diet cultures. (Moffitt et al., 2025)

In their systematic review of social media's influence on dietary habits, Moffitt and Thomas (2025) found that although some content promoted healthy eating behaviours, the most frequent correlation observed in

adolescents was between social media exposure and unhealthy dietary choices, including increased consumption of fast foods and sugar-sweetened beverages. (Moffitt et al., 2025)

The authors also reported associations between social media engagement and various forms of disordered eating, such as restrictive dieting, binge eating, and orthorexia nervosa—an obsession with "healthy" eating that paradoxically contributes to nutritional imbalance and psychological distress. (Moffitt et al., 2025)

These dietary tendencies are not merely incidental but may be deeply rooted in the normative cultural messages disseminated through influencer cultures and user-generated posts. Influencers often equate specific foods, dietary routines, or body types with success, attractiveness, or health, irrespective of scientific nutritional standards. (Moffitt et al., 2025)

Adolescents, who typically have limited media literacy and are still developing critical evaluation skills, may adopt these messages uncritically, leading to the adoption of fad diets or rigid eating behaviours aimed at achieving a particular body ideal. Over time, these behaviours can undermine balanced nutritional intake and contribute to both short-term and long-term health consequences. (Moffitt et al., 2025)

Another dimension of social media's influence on eating behaviours involves nutritional misinformation. Social platforms are replete with posts that propagate unverified or scientifically unsupported dietary advice. Such misinformation may gloss over the principles of balanced nutrition in favour of sensationalized or oversimplified messages about food and diet. (Prybutok et al., 2024)

For instance, recommendations that promote extreme calorie restriction or demonize entire food groups, if emulated by impressionable youth, can precipitate nutritional deficiencies and disrupt normal growth trajectories. A systematic review on children's diet behaviors highlighted how easily nutritional misinformation and "fad diet" content on social media leads to confusion and potentially harmful eating practices, particularly among younger users who may lack the knowledge or context to critically assess such information. (Prybutok et al., 2024)

The consequences of these emerging patterns are multifaceted and extend beyond physical health to encompass psychosocial well-being. Adolescents experiencing body dissatisfaction often report lower self-esteem, heightened anxiety, depressive symptoms, and impaired social functioning. (Vincente-Benito et al., 2023)

These psychological symptoms can become intertwined with eating behaviours—for example, restrictive eating often co-occurs with anxiety about food, control, or social judgment, while binge eating may arise as a maladaptive coping strategy for distress related to body image. Such interrelations reflect a bidirectional relationship between body image perceptions and dietary practices, where negative self-evaluation potentiates unhealthy eating, which in turn can exacerbate body dissatisfaction. (Vincente-Benito et al., 2023)

**Social Media and Adolescent Body Image Perception**

Body image — how individuals perceive, think, and feel about their physical appearance — is a central concern during adolescence. Social media platforms, by their very nature, emphasize visual content and social validation mechanisms such as likes, shares, and comments. Research indicates that exposure to appearance-

focused content on social media is strongly associated with negative body image and body dissatisfaction among adolescents. (Demetriou et al., 2025)

Cross-sectional and review studies have documented consistent associations between frequent social media use and heightened concerns about body size, shape, and weight, often driven by comparisons with idealized images portrayed online. Mechanisms underlying this relationship include social comparison and internalization of beauty ideals. (Demetriou et al., (2025)

Adolescents often assess their own bodies in relation to the images presented on their feeds, a process that is magnified by algorithmic recommendations that reinforce attention toward appearance-centred content. Studies have found that platforms heavily focused on visual self-presentation can create a climate in which adolescents feel pressured to achieve unrealistic physical standards, thereby increasing vulnerability to body dissatisfaction and low self-esteem. (Demetriou et al., 2025)

Indeed, exposure to user-generated content emphasizing thinness or particular body types is linked with increased body size dissatisfaction and negative self-evaluation in teenagers. (Demetriou et al., 2025)

Further evidence suggests that the type of content consumed may predict body image disturbance more strongly than the duration of social media use itself. For example, exposure to weight loss or ideal body content — irrespective of overall screen time — correlates with increased fears of negative appearance evaluation and disordered eating tendencies. (Sanzari et al., 2023)

**Influence on Eating Behaviours and Dietary Choices:**

The impact of social media on adolescents extends beyond body image to demonstrably affect eating behaviours. Emerging research shows that social media not only shapes perceptions of physical appearance but also influences attitudes toward food and diet. Systematic reviews of the evidence reveal that adolescents' dietary behaviours including the consumption of fast foods, sugar-sweetened beverages, and other unhealthy food choices are frequently associated with social media engagement. (Moffitt et al., 2025)

Social platforms often function as informal sources of diet and nutrition information, where peers, influencers, and commercial entities propagate food-related content. Unfortunately, much of this content may be misleading, oversimplified, or not grounded in scientific nutritional principles. Trends promoting restrictive diets, "clean eating," and extreme wellness regimens frequently circulate online, and adolescents may interpret such messages as normative or desirable. (Moffitt et al., 2025)

Because adolescents typically have limited capacity for critical media analysis, they may adopt these dietary norms without understanding the potential nutritional consequences. Moreover, social media usage has been linked with disordered eating behaviours, such as restrictive eating, binge eating, and obsessive focus on "clean" or "healthy" foods to the point of obsession. (Moffitt et al., 2025)

These behaviours often emerge as coping strategies for body dissatisfaction, where adolescents attempt to regulate weight and shape through stringent eating practices. Increased exposure to normalized dieting content on social media may reinforce unhealthy eating patterns and contribute to the development of eating disorders, particularly among vulnerable individuals. (Moffitt et al., 2025)

**Nutritional Deficiencies and Public Health Implications:**

Dietary choices influenced by social media can lead not only to behavioural changes but also to tangible nutritional deficiencies. When adolescents adopt restrictive eating patterns in pursuit of idealized body appearances, they risk forgoing essential nutrients necessary for healthy growth and development. Nutritional deficiencies during adolescence can compromise physical maturation, cognitive performance, immune function, and long-term health outcomes. (Blanchard et al., 2023)

Though research directly linking social media exposure to specific micronutrient deficiencies is limited, the pathways from disordered eating behaviours to nutritional imbalance are well recognized in public health literature. Unhealthy diets characterized by inconsistent meal patterns, avoidance of food groups, or reliance on processed and convenience foods can result in inadequate intake of vitamins, minerals, and macronutrients essential for physical growth. (Blanchard et al., 2023)

For example, chronic restrictive eating may lead to deficiencies in iron, calcium, vitamin D, and essential fatty acids — nutrients integral to skeletal development, neurological function, and metabolic health. Health professionals suggest that ongoing exposure to harmful social media messaging about food and body image may diminish adolescents' ability to make informed dietary decisions that support nutritional adequacy and wellness. (Blanchard et al., 2023)

**Psychosocial Correlates and Broader Effects:**

The influence of social media on body image and eating behaviours is not isolated but intertwined with broader psychosocial outcomes. Systematic reviews examining social media and adolescent mental health reveal significant correlations between social media use, body dissatisfaction, disordered eating symptoms, low self-esteem, anxiety, and depressive symptoms. (Blanchard et al., 2023)

Mental health challenges can, in turn, exacerbate unhealthy eating behaviours, creating a feedback loop wherein psychological distress and maladaptive dietary practices reinforce one another.Particularly concerning is evidence that vulnerable adolescents — those already experiencing body dissatisfaction — are shown more content related to disordered eating and harmful appearance standards by platform algorithms. (Blanchard et al., 2023)

Although causality cannot be definitively established, this pattern suggests that the social media environment may amplify existing concerns, intensifying susceptibility to unhealthy behaviours rather than merely reflecting them. (Blanchard et al., 2023)

**Mediating and Moderating Factors:**

Several factors influence the strength and direction of social media's impact on teenagers. Gender appears to moderate the relationship; studies indicate that female adolescents often report higher levels of body dissatisfaction and disordered eating in response to appearance-centred content, whereas male adolescents may be influenced by muscularity ideals. Other moderators include pre-existing body image concerns, individual media literacy, parental involvement, and cultural context. (Blanchard et al., 2023)

Additionally, adolescents with higher levels of social media literacy and positive body appreciation may be somewhat protected from the adverse effects of appearance-focused content. (Tunga et al., 2022)

**Need for Research and Intervention:**

Understanding the complex interplay between social media exposure, body image perception, eating behaviours, and nutritional health among adolescents is imperative for guiding interventions and policy. Although evidence from existing research consistently demonstrates associations between social media use and negative outcomes — including body dissatisfaction, disordered eating, and unhealthy dietary patterns — gaps remain regarding causal pathways, long-term effects, and effective preventive strategies. (Suhag et al., 2024)

Future research should prioritize longitudinal designs, culturally diverse populations, and intervention studies aimed at improving digital media literacy and promoting balanced nutritional knowledge. (Suhag et al., 2024) Educational programs that foster critical engagement with social media content, promote positive body image, and provide evidence-based nutrition knowledge are crucial in mitigating harmful outcomes. Parents, educators, and health professionals must be equipped to support adolescents in navigating the digital landscape with resilience and informed judgment. (Suhag et al., 2024)

## OBJECTIVE:

- ✓ To study how often and how long teenagers use social media.
- ✓ To understand how teenagers feel about their body image and whether they are satisfied or dissatisfied with their body.
- ✓ To find out how social media affects the eating habits of teenagers.
- ✓ To identify the connection between body image and eating behaviours among adolescents.
- ✓ To suggest nutrition education and media awareness programs to help teenagers develop a healthy body image and good eating habits.

## Scope of the Study

The present study focuses on examining the influence of social media on body image perception, eating behaviours, and nutritional deficiencies among teenagers aged 13–19 years. It assesses patterns of social media usage, including the type of platforms used and duration of exposure. The study explores adolescents' perceptions of body image and the level of body dissatisfaction influenced by social media content.

Eating behaviours such as meal patterns, food choices, dieting practices, and unhealthy eating habits are also evaluated. Dietary intake is assessed to identify the prevalence of selected nutritional deficiencies among teenagers. The study examines the relationship between social media use and eating behaviours. It also analyzes the association between body image perception and nutritional status.

Gender differences in body image and eating behaviours are considered. Data are collected using structured questionnaires, dietary assessment methods, and anthropometric measurements. The study is limited to a selected population and setting. It adopts a cross-sectional research design. Causal relationships are not established. Clinical diagnosis of eating disorders is not included. Biochemical assessment of nutrient deficiencies is not carried out. The findings aim to support nutrition education and media literacy interventions for adolescents.

## Need for the Study

Adolescence is a critical stage of growth and development characterized by rapid physical and psychological changes. Social media has become an integral part of teenagers' daily lives. Adolescents are frequently exposed to idealized body images and appearance-focused content. Such exposure may negatively influence body image perception and self-esteem. Body dissatisfaction can lead to unhealthy eating behaviours among teenagers.

These behaviours include meal skipping, restrictive dieting, and binge eating. Social media also promotes fad diets and unrealistic nutrition messages. Adoption of such practices may result in inadequate nutrient intake. Nutritional deficiencies during adolescence can impair growth and development. Limited studies have examined the combined impact of social media on body image, eating behaviours, and nutritional status.

Most research focuses on psychological or dietary aspects separately. There is a lack of data among teenage populations in many regions. Understanding these relationships is essential for effective intervention planning. The study can help in developing nutrition education programs. It can also support media literacy initiatives to promote healthy adolescent development.

# CHAPTER-II

# REVIEW OF LITERATURE

The review of literature pertaining to the study **"A STUDY ON THE EFFECT OF SOCIAL MEDIA INFLUENCES ON BODY IMAGE PERCEPTION, EATING PERFORMANCE, AND AWARENESS OF NUTRITIONAL DEFICIENCIES AMONG ADOLESCENT GIRLS."** Is given under the following heading:

2.1Adolescence and Nutrition

2.2Concept of Body Image

2.3 Body Image Dissatisfaction Among Adolescents

2.4 Emergence of Social Media and Adolescent Exposure

2.5 Social Media and Body Image Perception

2.6 Social Media Influence on Eating Behaviour

2.7 Nutritional Consequences of Social Media–Driven Body Ideals

2.8 Protective Role of Nutrition Knowledge and Media Literacy

2.9 Eating Behaviour During Adolescence

2.10 Influence of Social Media on Eating Behaviour

2.11 Disordered Eating Behaviours in Adolescents

2.12 Nutritional Deficiencies Among Adolescents

2.13 Impact of Eating Behaviour on Nutritional Status

2.14 Public Health Implications of Nutritional Deficiencies

2.15 Role of Nutrition Education in Preventing Nutritional Deficiencies

2.16 Psychosocial Effects Associated with Body Image and Eating Behaviour

2.17 Self-Esteem, Body Image, and Nutrition

2.18 Anxiety, Depression, and Disordered Eating

2.19 Social Isolation, Peer Pressure, and Eating Behaviour

2.20 Long-Term Psychosocial and Nutritional Consequences

2.21 Role of Nutrition Education and Psychosocial Support

2.22 Research Gap

Adolescence represents a pivotal stage in the life course marked by rapid physical growth, onset of sexual maturity, advances in cognitive abilities, and significant psychosocial transitions. Nutritionally, this stage serves as a second critical opportunity—following early childhood—to address existing nutrient deficiencies and to instill healthy eating habits that can be sustained into adult life. (World Health Organization, 2014).
The heightened physiological requirements of this period demand sufficient consumption of energy, protein, and essential vitamins and minerals to adequately support the rapid pace of growth and development. (World Health Organization, 2014).
During adolescence, substantial alterations occur in body composition, including gains in lean tissue, adipose tissue, and bone mineral content. These physiological changes are largely shaped by dietary intake and overall nutritional status. (Sawyer et al., 2012).

Poor nutrition during this stage can hinder linear growth, postpone pubertal development, and negatively affect cognitive functioning, whereas excessive or unbalanced dietary intake may increase the likelihood of overweight, obesity, and the later development of non-communicable diseases (Sawyer et al., 2012).

In recent decades, adolescent nutritional well-being has been increasingly shaped by environmental and socio-cultural influences, with mass media and social media emerging as particularly powerful determinants. Engagement with digital platforms has transformed food choices, eating habits, and perceptions of body image, thereby affecting nutritional status. Adolescents are frequently exposed to unrealistic body ideals, popular diet trends, and food-related messaging that often lacks alignment with scientifically supported nutritional recommendations. (Vincente-Benito & Ramírez-Durán, 2023)

From a food and nutrition standpoint, body image perception is strongly associated with dietary behaviours. Adolescents who experience dissatisfaction with their body weight or shape are more likely to adopt unhealthy eating patterns, including skipping meals, restrictive dieting, or frequent consumption of energy-dense but nutrient-poor foods. Such practices elevate the risk of micronutrient deficiencies, notably iron deficiency anemia, inadequate calcium intake, and suboptimal consumption of vitamins A and D. (Blanchard et al., 2023)

Consequently, nutrition education during adolescence holds critical importance. Sound nutritional knowledge empowers adolescents to make healthier food choices, counteract negative media influences, and sustain balanced dietary habits. Evidence suggests that adolescents with greater nutrition awareness exhibit improved dietary diversity and better nutritional status compared with their less informed counterparts. (Ansar et al., 2024,).

In light of the rising burden of nutritional disorders among adolescents and the expanding impact of social media on eating behaviours and body image, a comprehensive examination of the existing literature is warranted. This review seeks to explore adolescence as a nutritionally sensitive and vulnerable phase, emphasizing the critical role of adequate nutrition in supporting healthy growth and development during this period.

## 2.1Adolescence and Nutrition

### 2.1.1. Nutritional Significance of Adolescence

Adolescence is characterized by an intense phase of physical growth, ranking second only to infancy in terms of growth velocity. During this period, nearly 20–25% of final adult stature and about 40–50% of adult body mass are achieved. Such accelerated growth substantially increases the body's requirements for energy and key nutrients, particularly protein, calcium, iron, zinc, and essential vitamins such as A, D, and those of the B-complex group. (UNICEF, 2019).

Sufficient energy intake is vital to support the elevated metabolic demands associated with rapid growth, increased physical activity, and basal physiological functions. Inadequate energy consumption during adolescence may lead to chronic energy deficiency, delayed onset of puberty, and suboptimal physical development. (Popkin et al., 2012).

In contrast, excessive energy intake—especially from foods high in calories but low in nutritional value—has been linked to the rising prevalence of overweight and obesity among adolescents across the globe (Popkin et al., 2012).

Protein is a fundamental nutrient during adolescence, as it is essential for tissue growth, muscle accretion, and proper hormonal activity. Research suggests that insufficient protein intake during this stage can result in diminished muscle mass and weakened immune responses. (Gibson et al., 2018,).

Diets that lack adequate amounts of high-quality protein sources, including pulses, milk and milk products, eggs, and lean meats, may adversely affect normal growth and developmental outcomes (Gibson et al., 2018,).

### 2.1.2. Micronutrient Requirements during Adolescence

Ensuring adequate intake of micronutrients is especially crucial during adolescence, as this stage is characterized by heightened physiological demands. Iron requirements rise markedly during this period, particularly among adolescent girls following the onset of menstruation. (Kotecha et al., 2013,).

Iron deficiency anemia continues to be one of the most widespread nutritional disorders affecting adolescents in developing nations, including India. The presence of anemia during adolescence is linked to symptoms such as tiredness, diminished scholastic performance, and weakened immune competence (Kotecha et al., 2013,).

Calcium and vitamin D are essential for optimal bone development during adolescence, given that approximately 45% of peak bone mass is accrued during these years. Insufficient intake of calcium-rich foods, along with inadequate exposure to sunlight, can compromise bone health and increase the risk of osteoporosis in later life. (Bonjour et al., 2014,).

Research has highlighted low calcium consumption among adolescents, largely attributed to declining intake of milk and dairy products and a growing preference for carbonated and sweetened beverages (Bonjour et al., 2014,).

Vitamin A is a key micronutrient involved in maintaining immune function, visual health, and the integrity of epithelial tissues. Even mild or subclinical vitamin A deficiency in adolescents can heighten vulnerability to infections and adversely affect normal growth. Limited consumption of fruits, vegetables, and animal-based foods has been identified as a major contributing factor to vitamin A inadequacy within this age group (West et al., 2013,).

### 2.1.3. Dietary Patterns and Eating Behaviours in Adolescence

Eating habits formed during adolescence tend to track into adult life, making this stage critical for the development of long-term dietary behaviours. However, adolescence is commonly characterized by irregular eating schedules, frequent snacking, and a strong preference for fast foods and sugar-sweetened beverages. (Rampersaud et al., 2005,).

Breakfast skipping is particularly prevalent among adolescents and has been associated with insufficient nutrient intake, poorer academic achievement, and a heightened risk of overweight and obesity (Rampersaud et al., 2005,).

Adolescents often consume inadequate amounts of fruits, vegetables, whole grains, and pulses, leading to low intake of dietary fiber and essential micronutrients. At the same time, a growing reliance on processed and convenience foods rich in salt, added sugars, and unhealthy fats contributes to overall poor diet quality. Such dietary practices adversely affect nutritional status and elevate the risk of metabolic and lifestyle-related disorders during later stages of life (Larson et al., 2016).

Food choices during adolescence are strongly influenced by peers, taste preferences, ease of access, and exposure to mass media. In particular, social media platforms increasingly promote food advertising and popular diet trends that may foster unhealthy eating patterns. (Harris et al., 2009).

These powerful influences often outweigh conventional nutrition education messages, underscoring the importance of implementing focused and age-appropriate nutritional interventions during adolescence (Harris et al., 2009).

### 2.1.4. Nutritional Problems Common Among Adolescents

Adolescents increasingly experience a dual burden of malnutrition, marked by the simultaneous presence of undernutrition and overnutrition. Undernutrition is reflected through conditions such as stunting, thinness, and deficiencies of essential micronutrients, whereas overnutrition is expressed as overweight and obesity. This contrasting pattern of malnutrition is becoming more prominent in low- and middle-income countries that are undergoing rapid dietary and lifestyle transitions (WHO, 2017).

Iron deficiency anemia continues to be the most widespread nutritional problem among adolescent girls. Data from national-level surveys in India indicate a high prevalence of anemia, largely attributable to insufficient dietary iron intake, low iron bioavailability, and increased physiological requirements during adolescence. (International Institute for Population Sciences, 2021).

The consequences of anemia at this stage extend into adulthood, contributing to adverse outcomes such as elevated maternal mortality and increased risk of low birth weight in future pregnancies (International Institute for Population Sciences, 2021).

The prevalence of overweight and obesity among adolescents has escalated considerably, driven by reduced physical activity, prolonged screen exposure, and frequent consumption of calorie-dense foods. (Lobstein et al., 2015).

Adolescents with obesity are more likely to develop insulin resistance and are at greater risk of type 2 diabetes and cardiovascular diseases later in life, highlighting the long-term health implications of adolescent over nutrition (Lobstein et al., 2015).

### 2.1.5. Importance of Nutrition Education During Adolescence

Nutrition education plays a crucial role in enhancing dietary behaviours and improving the nutritional status of adolescents. Educational initiatives that focus on balanced meal patterns, appropriate portion sizes, and the consumption of nutrient-dense foods enable adolescents to establish healthy eating habits and navigate unhealthy food environments more effectively. (Contento, 2011).

Successful nutrition education programs place strong emphasis on practical competencies, including wise food choices, basic meal planning, and understanding food labels (Contento, 2011).

Evidence from various studies indicates that nutrition education interventions contribute to improved dietary diversity, higher intake of fruits and vegetables, and greater awareness of micronutrient requirements among adolescents. Those who participate in school-based nutrition education programs consistently demonstrate enhanced nutrition knowledge and adopt healthier eating practices compared to their peers (Ansar et al., 2024).

In the context of increasing digital media exposure, the integration of media literacy within nutrition education has become particularly important. Adolescents who develop critical evaluation skills are better equipped to assess nutrition-related messages encountered on social media and are less likely to engage in harmful or misleading dietary practices. Such combined educational approaches are essential for fostering optimal nutritional well-being during the adolescent years (Suhag & Rauniyar, 2024).

### 2.2Concept of Body Image

Body image can be defined as an individual's perceptions, thoughts, and emotional responses regarding their physical appearance, including body size, shape, and weight. During adolescence, body image assumes particular importance as rapid bodily changes coincide with increased self-consciousness and social comparison. (Cash & Smolak, 2011).

From a nutritional viewpoint, body image plays a key role in shaping food choices, eating behaviours, and overall nutritional status. Adolescents who hold negative perceptions of their bodies are more likely to adopt unhealthy dietary practices that adversely affect nutrient intake and general health (Cash & Smolak, 2011).

Body image is a multidimensional construct encompassing perceptual, cognitive, affective, and behavioural dimensions. The perceptual aspect reflects how adolescents view their physical form, while the cognitive and affective components involve beliefs, attitudes, and levels of satisfaction or dissatisfaction with appearance. (Grogan, 2016).

The behavioural dimension has direct nutritional implications, as body dissatisfaction frequently leads to dieting, restrictive eating, or deliberate avoidance of meals (Grogan, 2016).

Adolescence represents a nutritionally vulnerable stage during which concerns about body appearance may take precedence over normal hunger and satiety signals. Research indicates that adolescents who are dissatisfied with their body shape are more inclined to skip meals particularly breakfast and limit consumption

of nutrient-rich foods in efforts to regulate body weight. These behaviours can contribute to micronutrient deficiencies and suboptimal growth and development outcomes (Neumark-Sztainer et al., 2006).

### 2.3 Body Image Dissatisfaction Among Adolescents

Body dissatisfaction refers to a negative personal appraisal of one's overall body or particular physical features. It is widely prevalent during adolescence and is recognized as a significant risk factor for the development of unhealthy eating patterns and eating-related disorders. (Stice & Shaw, 2002).

From a foods and nutrition perspective, dissatisfaction with body appearance often results in restrictive dietary practices, excessive dieting, or increased dependence on low-energy, nutrient-poor food choices (Stice & Shaw, 2002).

Evidence consistently shows that adolescent girls experience higher levels of body dissatisfaction, largely driven by sociocultural expectations that promote thinness as an ideal body type. However, emerging research indicates that adolescent boys are also increasingly affected, with many aspiring toward a lean or muscular body shape. (Ricciardelli & Yager, 2016).

These gender-specific ideals influence dietary behaviours, as boys may resort to increased use of protein supplements, while girls often limit fat and carbohydrate intake, thereby compromising overall dietary balance (Ricciardelli & Yager, 2016).

Body dissatisfaction is strongly associated with disordered eating behaviours, including prolonged fasting, use of weight-control pills, binge eating episodes, and purging practices. Such behaviours adversely impact nutritional adequacy and heighten the risk of deficiencies in key nutrients such as iron, calcium, vitamin D, and B-complex vitamins. (Loth et al., 2014).

Sustained engagement in these unhealthy practices can lead to long-term consequences, including impaired metabolic functioning and compromised bone health (Loth et al., 2014).

### 2.4 Emergence of Social Media and Adolescent Exposure

Social media platforms including Instagram, TikTok, Snapchat, and YouTube have become deeply embedded in the everyday lives of adolescents. These highly visual platforms frequently emphasize appearance-centered content, positioning them as influential determinants of body image perceptions. (Vincente-Benito & Ramírez-Durán, 2023).

From a nutritional standpoint, exposure to social media plays a significant role in shaping adolescents' beliefs about "ideal" body types and acceptable eating behaviours, often in ways that are not grounded in scientific or evidence-based nutrition principles (Vincente-Benito & Ramírez-Durán, 2023).

Adolescents typically spend several hours each day interacting with social media, thereby increasing their exposure to carefully curated images, popular diet trends, and food-related messaging. Platform algorithms often amplify appearance- and diet-oriented content, especially for users who engage with weight loss or body

transformation material. Continuous exposure to such content can heighten social comparison and contribute to increased body dissatisfaction (Fardouly & Vartanian, 2016).

Unlike traditional forms of media, social media facilitates ongoing peer comparison and immediate feedback through mechanisms such as likes, comments, and shares. This interactive environment intensifies adolescents' preoccupation with physical appearance and the pursuit of social approval. As a result, dietary behaviours may be shaped more by the desire to conform to socially rewarded body ideals than by considerations of nutritional balance and health (Perloff, 2014).

### 2.5 Social Media and Body Image Perception

A growing body of research highlights a strong relationship between social media use and adverse body image outcomes among adolescents. Evidence from systematic reviews suggests that frequent exposure to idealized and often unrealistic body representations on social networking platforms is associated with heightened body dissatisfaction, increased appearance-related anxiety, and the internalization of unattainable beauty ideals (Holland & Tiggemann, 2016).

Adolescents commonly engage in upward body comparisons with influencers, celebrities, and peers depicted online. Although such images are frequently altered through editing, filters, or selective presentation, adolescents may interpret them as authentic and achievable. These comparisons can distort body perception, intensify dissatisfaction, and subsequently influence eating behaviours, including increased dietary restraint and weight-control practices (Sanzari et al., 2023).

Research further indicates that active, appearance-oriented engagement—such as posting selfies or monitoring likes and comments—is more strongly linked to body dissatisfaction than passive consumption of content. (Meier & Gray, 2014).

Adolescents who participate in self-presentation activities are more likely to closely regulate their weight and food intake in an effort to meet perceived aesthetic norms, often undermining balanced and adequate nutrition (Meier & Gray, 2014).

### 2.6 Social Media Influence on Eating Behaviour

Social media exerts a substantial influence on adolescents' eating behaviours by popularizing diet culture, weight-loss challenges, and "clean eating" movements. These trends frequently promote restrictive practices, exclusion of entire food groups, or extreme dietary regimens that lack nutritional balance. Adolescents may follow such practices without sufficient awareness of their potential nutritional risks (Moffitt & Thomas, 2025).

Influencer marketing has emerged as a powerful driver of food-related decisions among adolescents. Influencers often endorse low-calorie eating plans, detox products, protein supplements, or meal replacement options, framing them as effective strategies for achieving an ideal physique. Adolescents may replace regular

meals with these promoted products, increasing the likelihood of inadequate intake of essential nutrients (Prybutok et al., 2024,).

An increasing association has also been observed between social media exposure and disordered eating patterns, including restrictive dieting, binge eating, and orthorexia nervosa. Orthorexia, marked by an excessive preoccupation with "healthy" eating, can lead to nutritional imbalances and reduced social engagement. Collectively, these maladaptive eating behaviours compromise dietary diversity and pose risks to long-term nutritional health (Tunga, 2022).

### 2.7 Nutritional Consequences of Social Media–Driven Body Ideals

Body ideals promoted through social media frequently prioritize weight reduction or physical alteration over overall health and nutritional well-being. In an effort to align with these ideals, adolescents may engage in behaviours such as restricting calorie intake, skipping meals, or eliminating fats and carbohydrates from their diets. These practices significantly elevate the risk of chronic energy deficiency, iron deficiency anemia, and compromised bone health (Blanchard et al., 2023).

Iron deficiency anemia is especially common among adolescent girls who follow restrictive dietary patterns. The avoidance of iron-rich foods, including green leafy vegetables, pulses, and animal-source foods, contributes to insufficient iron intake. (Bonjour et al., 2014).

Additionally, inadequate consumption of calcium and vitamin D is frequently observed, largely due to reduced intake of dairy products and limited sun exposure linked to prolonged screen time and indoor lifestyles (Bonjour et al., 2014).

Sustained adherence to nutritionally inadequate diets during adolescence can lead to long-term adverse outcomes, such as suboptimal peak bone mass development, delayed physical growth, and increased vulnerability to non-communicable diseases in later life. These findings underscore the importance of addressing the influence of social media within comprehensive nutrition education strategies (WHO, 2017).

### 2.8 Protective Role of Nutrition Knowledge and Media Literacy

Nutrition knowledge serves as a critical protective factor in reducing the negative impact of social media on adolescents' body image and eating behaviours. Adolescents with higher levels of nutrition literacy are better equipped to differentiate between scientifically sound dietary guidance and misleading or inaccurate information circulated on social media platforms. As a result, they tend to exhibit healthier eating behaviours and greater dietary diversity (Ansar et al., 2024).

Media literacy education further enhances adolescents' ability to critically assess visual and textual content encountered on social media. Interventions that combine nutrition education with media literacy have demonstrated effectiveness in decreasing body dissatisfaction and fostering a more positive body image. These programs shift the focus from appearance-based ideals toward health, functionality, and adequate nourishment (McLean et al., 2017).

From a food and nutrition perspective, equipping adolescents with accurate nutritional information alongside strong critical thinking skills is essential for promoting healthy attitudes toward food and body image in today's digitally driven environment (Suhag & Rauniyar, 2024).

### 2.9 Eating Behaviour During Adolescence

Eating behaviour encompasses habitual patterns of food intake, meal frequency and timing, food selection, and attitudes toward eating. Adolescence represents a developmental transition in which food-related decisions become increasingly independent, shifting from parental guidance to stronger influences from peers and media. (Story, Neumark-Sztainer, & French, 2002).

From a nutritional perspective, this transition often leads to inconsistent meal patterns, frequent snacking, and a growing preference for convenience and ultra-processed foods, all of which can adversely affect diet quality and nutrient sufficiency (Story, Neumark-Sztainer, & French, 2002).

Common eating practices among adolescents include skipping meals—especially breakfast—frequent intake of fast foods, and insufficient consumption of fruits, vegetables, and whole grains. These habits are associated with inadequate intake of key nutrients such as iron, calcium, dietary fiber, and vitamins A and C. Research indicates that adolescents who regularly miss meals are more likely to exhibit poorer overall diet quality and compromised nutritional status (Rampersaud et al., 2005).

Psychological determinants, particularly body image concerns and preoccupation with weight, exert a strong influence on adolescent eating behaviour. Adolescents who are dissatisfied with their body shape are more prone to restrictive eating and unhealthy weight-control practices. (Neumark-Sztainer et al., 2012).

Such behaviours interfere with normal hunger and satiety regulation and contribute to insufficient nutrient intake, thereby increasing the likelihood of nutritional deficiencies (Neumark-Sztainer et al., 2012).

### 2.10 Influence of Social Media on Eating Behaviour

Social media has become a major force shaping adolescents' eating behaviours by influencing perceptions of food, dieting, and health. Platforms such as Instagram, TikTok, and YouTube frequently showcase diet trends, food challenges, and visually driven eating practices that prioritize appearance over nutritional balance. Adolescents may adopt these behaviours without adequate understanding of their potential nutritional consequences (Moffitt & Thomas, 2025).

Much of the food-related content on social media promotes energy-dense, nutrient-poor products, including fast foods, sugar-sweetened beverages, and packaged snacks. Exposure to such marketing has been linked to increased consumption of unhealthy foods and reduced intake of nutrient-rich alternatives. Due to developing cognitive abilities and limited media literacy, adolescents are particularly vulnerable to these persuasive promotional strategies (Boyland et al., 2016).

Beyond promoting unhealthy food choices, social media also facilitates the dissemination of inaccurate or misleading dietary information. Adolescents may follow influencers without formal nutrition training who advocate extreme practices such as detox regimens, prolonged fasting, or exclusion of entire food groups. Adoption of these approaches can result in insufficient intake of essential macro- and micronutrients required for normal growth and development (Prybutok et al., 2024).

### 2.11 Disordered Eating Behaviours in Adolescents

Disordered eating behaviours include a spectrum of abnormal eating patterns such as restrictive dieting, binge eating, purging, and an excessive preoccupation with consuming "healthy" foods. These behaviours are becoming increasingly common during adolescence and are frequently associated with body dissatisfaction and exposure to social media. From a nutritional perspective, disordered eating undermines dietary variety and nutrient adequacy (Stice, Marti, & Durant, 2011).

Restrictive eating practices, including meal skipping or severe calorie limitation, may lead to chronic energy deficiency and impaired physical growth. Adolescents engaging in such behaviours often experience symptoms such as fatigue, diminished concentration, and reduced immune resistance. Prolonged dietary restriction during this critical developmental period can have long-term adverse effects on metabolic function and bone health (Golden et al., 2015).

Orthorexia nervosa, defined by an obsessive concern with consuming only "pure" or "clean" foods, has gained increasing recognition in recent years. Although it is often viewed as a health-oriented behaviour, orthorexia can result in unnecessary elimination of nutrient-dense foods and social withdrawal. This condition is of particular concern among adolescents who are heavily exposed to social media content that promotes rigid and unrealistic dietary ideals (Tunga, 2022).

### 2.12 Nutritional Deficiencies Among Adolescents

Nutritional deficiencies continue to pose a significant public health challenge during adolescence, particularly in low- and middle-income countries. Accelerated growth, elevated nutrient requirements, and unhealthy dietary habits contribute to insufficient intake of essential nutrients. (WHO, 2014).

Iron deficiency anemia remains the most common nutritional deficiency among adolescents, especially among girls, due to increased physiological demands and inadequate dietary iron consumption (WHO, 2014).

Iron deficiency during adolescence is linked to adverse outcomes such as diminished cognitive functioning, reduced physical endurance, and heightened vulnerability to infections. Limited consumption of iron-rich foods, including green leafy vegetables, pulses, and animal-based products, plays a major role in the high prevalence of anemia. In addition, low bioavailability of dietary iron further aggravates this condition (Kotecha et al., 2013).

Deficiencies of calcium and vitamin D are also frequently observed among adolescents, largely due to inadequate intake of dairy products and insufficient exposure to sunlight. These deficiencies negatively

influence bone mineralization and the attainment of optimal peak bone mass, thereby increasing the risk of osteoporosis in later life. Evidence suggests that adolescents with low consumption of milk and milk products exhibit poorer indicators of bone health (Bonjour et al., 2014).

### 2.13 Impact of Eating Behaviour on Nutritional Status

Eating behaviour is a key determinant of nutritional status during adolescence. Irregular meal schedules, limited dietary variety, and dependence on processed and convenience foods contribute to imbalanced nutrient intake. Adolescents whose diets are rich in refined carbohydrates and fats but deficient in essential micronutrients face an increased risk of both undernutrition and overnutrition (Popkin et al., 2012).

Overnutrition, manifesting as overweight and obesity, has become increasingly prevalent among adolescents due to excessive energy intake coupled with sedentary lifestyles. Despite high caloric consumption, obese adolescents often have poor micronutrient intake, leading to the coexistence of obesity and micronutrient deficiencies—a phenomenon referred to as the double burden of malnutrition (Lobstein et al., 2015).

Undernutrition during adolescence, including thinness and micronutrient inadequacies, adversely affects physical growth and delays pubertal development. Adolescents with compromised nutritional status are more susceptible to long-term health consequences, such as reduced work capacity and an elevated risk of chronic non-communicable diseases (UNICEF, 2019).

### 2.14 Public Health Implications of Nutritional Deficiencies

Nutritional deficiencies during adolescence carry profound public health implications, particularly for maternal and child health outcomes. Adolescent girls with anemia are more likely to enter pregnancy with poor nutritional reserves, increasing the risk of low birth weight, preterm birth, and maternal mortality. Improving adolescent nutrition is therefore essential to interrupt the intergenerational transmission of malnutrition (IIPS, 2021).

Micronutrient deficiencies also negatively affect educational attainment and productivity. Adolescents with poor nutritional status frequently experience difficulties such as reduced attention span, higher absenteeism, and lower academic performance. At a population level, adolescent malnutrition represents a significant loss of human capital and economic productivity (Black et al., 2013).

Addressing adolescent nutritional deficiencies requires comprehensive, multi-sectoral interventions. Strategies such as nutrition education, implementation of school-based feeding programs, and regulation of food and diet-related marketing on social media platforms are critical for improving the nutritional health of adolescents (WHO, 2017).

### 2.15 Role of Nutrition Education in Preventing Nutritional Deficiencies

Nutrition education is a cornerstone in promoting healthy eating behaviours and preventing nutritional deficiencies among adolescents. Educational initiatives that emphasize balanced diets, regular meal patterns,

and the inclusion of nutrient-rich foods have been shown to enhance dietary intake and improve nutritional status. (Contento, 2011).

Adolescents with adequate nutrition knowledge are better positioned to resist unhealthy dietary influences propagated through social media (Contento, 2011).

School-based nutrition education programs are particularly effective in reaching adolescents across diverse socio-economic groups. These programs increase awareness of micronutrient requirements and encourage healthier food choices. Incorporating media literacy into nutrition education further strengthens adolescents' capacity to critically evaluate diet- and nutrition-related information encountered online (Ansar et al., 2024).

From a foods and nutrition standpoint, reinforcing nutrition education during adolescence is essential for supporting optimal growth, preventing nutrient deficiencies, and promoting positive long-term health outcomes (Suhag & Rauniyar, 2024).

**2.16 Psychosocial Effects Associated with Body Image and Eating Behaviour**

Psychosocial development during adolescence is closely intertwined with perceptions of physical appearance, self-worth, and the need for social acceptance. Body image dissatisfaction has been recognized as a major psychosocial stressor in this age group, affecting emotional health, social interactions, and eating behaviours. (Blanchard et al., 2023).

From a nutritional perspective, negative psychosocial experiences often translate into maladaptive eating patterns that adversely influence dietary intake and overall nutritional status (Blanchard et al., 2023).

Adolescents who experience dissatisfaction with their body image commonly report low self-esteem and heightened concern about appearance. These emotional responses may prompt unhealthy eating practices such as restrictive dieting, skipping meals, or emotionally driven eating. Such behaviours disrupt regular nutrient intake and may result in deficiencies of key nutrients essential for normal growth and cognitive development (Neumark-Sztainer et al., 2006).

**2.17 Self-Esteem, Body Image, and Nutrition**

Self-esteem is an important psychosocial factor influencing eating behaviour during adolescence. Adolescents with low self-esteem are more susceptible to adopting unrealistic body ideals reinforced by social media and peer comparisons. Internalization of these ideals often leads to dissatisfaction with body shape or weight and encourages engagement in unhealthy dietary practices (Perloff, 2014).

From a food and nutrition perspective, low self-esteem is associated with poorer diet quality, irregular eating patterns, and greater reliance on energy-dense comfort foods. Emotional eating triggered by stress or negative emotions typically results in excessive consumption of foods high in sugar and fat, while intake of nutrient-rich foods such as fruits, vegetables, and whole grains declines (Macht, 2008).

In contrast, adolescents with a positive body image and healthy self-esteem tend to exhibit better dietary diversity and more consistent meal routines. Those who prioritize body functionality and well-being over physical appearance are more likely to practice health-focused eating behaviours rather than restrictive, weight-centered dieting (Tylka & Wood-Barcalow, 2015).

### 2.18 Anxiety, Depression, and Disordered Eating

Anxiety and depressive symptoms are becoming increasingly common during adolescence and are strongly associated with body dissatisfaction and disordered eating behaviours. Adolescents experiencing anxiety related to appearance or social evaluation may adopt restrictive eating as a coping mechanism to regain a sense of control, thereby jeopardizing adequate nutrient intake (Stice et al., 2011).

Depression is also linked to disruptions in appetite and eating patterns, ranging from reduced food intake to excessive eating. Both patterns can negatively affect nutritional status: appetite loss may lead to insufficient intake of energy, protein, and micronutrients, while overeating often involves foods of low nutritional quality, increasing the risk of weight gain and nutrient deficiencies (Jacka et al., 2010).

The coexistence of mental health challenges and poor dietary habits reflects a bidirectional relationship, where inadequate nutrition can worsen psychological distress and psychological problems can further impair dietary behaviours. This interaction highlights the importance of incorporating psychosocial considerations into nutrition-based interventions for adolescents (Blanchard et al., 2023).

### 2.19 Social Isolation, Peer Pressure, and Eating Behaviour

Peer relationships play a central role in shaping adolescents' psychosocial development and eating habits. The desire for acceptance often encourages adolescents to align with peer norms related to body image and food choices. (Salvy et al., 2012).

Peer influence may promote behaviours such as dieting, skipping meals, or consuming popular or "trending" foods frequently showcased on social media platforms (Salvy et al., 2012).

Both actual and perceived social isolation have been linked to emotional eating and unhealthy food choices. Adolescents who feel excluded or lonely may turn to food for comfort, typically choosing highly palatable foods rich in sugar and fat. These eating patterns contribute to poor dietary quality and elevate the risk of obesity and metabolic complications (Hawkley & Cacioppo, 2010).

Social media can further intensify peer comparison by continuously exposing adolescents to idealized portrayals of others' lifestyles and physical appearances. Adolescents who feel unable to meet these perceived standards may withdraw socially and engage in unhealthy eating behaviours, thereby further compromising their nutritional health and overall well-being (Vincente-Benito & Ramírez-Durán, 2023).

### 2.20 Long-Term Psychosocial and Nutritional Consequences

Psychosocial challenges encountered during adolescence can exert lasting effects on eating patterns and nutritional well-being. Adolescents who adopt disordered eating behaviours as a response to body image dissatisfaction or psychological distress are at a higher risk of maintaining these patterns into adulthood. (Loth et al., 2014).

Sustained unhealthy dietary habits increase vulnerability to non-communicable diseases, including obesity, type 2 diabetes, and cardiovascular conditions (Loth et al., 2014).

Prolonged nutritional inadequacies during adolescence may also impair cognitive development, academic achievement, and future work capacity, thereby influencing psychosocial functioning later in life. For instance, iron deficiency anemia has been associated with decreased concentration and learning ability, which can further intensify psychological stress and reduce overall quality of life (WHO, 2014).These observations highlight the importance of comprehensive approaches that simultaneously address both psychosocial well-being and nutritional health during adolescence (Sawyer et al., 2012).

### 2.21 Role of Nutrition Education and Psychosocial Support

The integration of psychosocial support within nutrition education is crucial for enhancing adolescent health outcomes. Nutrition education initiatives that incorporate elements such as body acceptance, stress coping strategies, and emotional regulation have been shown to be more effective in promoting healthy eating behaviours than programs focusing solely on dietary information (Contento, 2011).

School-based interventions that concurrently address body image concerns, mental health, and nutrition enable adolescents to develop a healthier and more balanced relationship with food and their bodies. These programs promote intuitive eating, prioritize nourishment over appearance, and strengthen resilience to negative influences arising from social media exposure (McLean et al., 2017).

From a food and nutrition standpoint, addressing underlying psychosocial factors is essential for preventing nutrient deficiencies and supporting optimal physical growth and development during adolescence (Ansar et al., 2024).

### 2.22 Research Gap

Although the existing body of research establishes clear associations among social media usage, body image dissatisfaction, eating behaviours, psychosocial stress, and nutritional outcomes in adolescents, important gaps persist. (Vincente-Benito & Ramírez-Durán, 2023).

A large proportion of studies rely on cross-sectional designs, which limit the ability to infer causal relationships between psychosocial determinants and nutritional deficiencies (Vincente-Benito & Ramírez-Durán, 2023).

Additionally, limited research has examined the combined effects of psychosocial factors and specific nutritional outcomes, particularly micronutrient deficiencies. While much of the literature emphasizes eating

disorders or obesity, fewer studies have explored deficiencies in nutrients such as iron, calcium, vitamin D, and protein intake in relation to social media exposure and body image concerns (Blanchard et al., 2023).

Within the Indian context, studies integrating social media influence, psychosocial health, and nutritional status among adolescents are scarce. Cultural norms, dietary patterns, and socio-economic inequalities unique to India are often underrepresented in global research, underscoring the need for context-specific investigations (IIPS, 2021).

Moreover, there is a lack of intervention-based research evaluating the effectiveness of integrated nutrition education and media literacy programs in improving both psychosocial well-being and nutritional outcomes. This gap indicates the need for studies that move beyond problem identification to assess sustainable and practical solutions (Suhag & Rauniyar, 2024).Accordingly, the present study aims to bridge these gaps by exploring the interrelationships among social media exposure, body image perception, eating behaviours, psychosocial factors, and nutritional deficiencies among adolescents, with the objective of informing nutrition-centered interventions and evidence-based policy development.

# CHAPTER III

# METHODOLOGY

The methodology pertaining to **"A STUDY ON THE EFFECT OF SOCIAL MEDIA INFLUENCES ON BODY IMAGE PERCEPTION, EATING PERFORMANCE, AND AWARENESS OF NUTRITIONAL DEFICIENCIES AMONG ADOLESCENT GIRLS."** includes the following phases.

## PHASE I: RESEARCH PLANNING AND DESIGN

3.1 Research Design

3.2 Study Setting

3.3 Study Population

3.4 Sample Size

3.5 Sampling Technique

3.6 Inclusion and Exclusion Criteria

**PHASE II: TOOL DEVELOPMENT AND VARIABLE IDENTIFICATION**

3.7 Variables of the Study

3.8 Tools and Techniques for Data Collection

3.9 Pre-Testing of the Tool

**PHASE III: DATA COLLECTION PROCEDURE**

3.10 Method of Data Collection

**PHASE IV: DATA ANALYSIS AND STUDY OUTCOME**

3.11 Statistical Analysis

3.12 Outcome of the Study

### 3.1 Research Design

The present study adopted a descriptive cross-sectional research design to examine the effect of social media influences on body image perception, eating behaviours, and awareness of nutritional deficiencies among teenagers. A cross-sectional design involves the collection of data from a specific population at a single point in time and is widely used in social and health sciences to identify patterns, associations, and relationships among variables.

This design was considered appropriate for the present investigation as it allows for the assessment of existing social media usage patterns and their association with body image perception and eating behaviours without manipulating any independent variables. The descriptive nature of the study helps in providing a detailed picture of the current scenario among adolescents, while the analytical component assists in examining relationships between selected variables.

### 3.2 Study Setting

The study was conducted in selected colleges located in and around kanniya kumara district, Tamil Nadu. The institutions were chosen based on accessibility, availability of the target population, and willingness of the authorities to permit data collection. The selected setting provided a suitable environment to reach adolescents from different socio-economic and educational backgrounds, ensuring diversity in the study sample.

Prior permission was obtained from the respective school and college authorities before initiating the study. Data collection was carried out within the institutional premises during hours convenient to the participants, ensuring minimal disruption to their academic schedule.

### 3.3 Study Population

The study population comprised teenagers aged 18-20 years studying in selected holy cross college. Adolescence is a critical developmental period characterized by physical, psychological, and social changes. During this phase, individuals are highly susceptible to external influences, particularly social media, which can significantly impact body image perception and dietary behaviours.Teenagers were selected as the target population because of their increased exposure to social networking platforms and their vulnerability to appearance-related comparisons, dieting trends, and nutrition misinformation.

### 3.4 Sample Size

A total of 100 teenagers were included in the study. The sample size was determined based on feasibility, time availability, and accessibility of participants, while ensuring adequate representation of both male and female adolescents. The selected sample size was considered sufficient to fulfil the objectives of the study and to perform meaningful statistical analysis.

### 3.5 Sampling Technique

A convenience sampling technique was employed for selecting the study participants. In this method, students who met the inclusion criteria and were available at the time of data collection were selected for the study. Convenience sampling was chosen due to ease of access to participants and time constraints associated with academic research. Although this technique has certain limitations in terms of generalizability, it is widely accepted for descriptive studies conducted at the postgraduate level.

### 3.6 Inclusion and Exclusion Criteria

3.6.1 Inclusion Criteria

- Teenagers aged between 18 and 20 years
- Students who actively use one or more social media platforms
- Participants willing to take part in the study
- Participants who provided informed consent

3.6.2 Exclusion Criteria

- Adolescents with diagnosed eating disorders
- Students suffering from chronic illnesses affecting dietary intake
- Teenagers who do not use social media
- Incomplete or partially filled questionnaires

### 3.7 Variables of the Study

3.7.1 Independent Variables

- Pattern of social media usage

- Duration of social media exposure
- Type of social media platforms used
- Exposure to influencer and body-related content

3.7.2 Dependent Variables

Body image perception

- Level of body dissatisfaction
- Eating behaviours
- Awareness of nutritional deficiencies

## 3.8 Tools and Techniques for Data Collection

Data for the present study were collected using a **structured and pre-tested questionnaire**, designed in accordance with the objectives of the study and after an extensive review of related literature. The tool was prepared in simple and comprehensible language to ensure clarity among the respondents. The questionnaire method was selected as it is cost-effective, time-efficient, and suitable for collecting data from a relatively large group within a short duration.

The instrument comprised both **closed-ended and multiple-choice questions**, enabling quantitative analysis of responses. The tool was divided into the following sections:

### 3.8.1 Section A: Socio-Demographic Characteristics

This section aimed to gather background information of the respondents. It included variables such as:

- Age
- Gender
- Course/Year of study
- Smartphone ownership
- Average daily screen time

These details helped in understanding the demographic profile of the study population and facilitated subgroup analysis where required.

### 3.8.2 Section B: Pattern and Duration of Social Media Usage

This section assessed the exposure level and usage pattern of social media among teenagers. The questions included:

- Types of social media platforms used
- Frequency of usage (daily/weekly)
- Average time spent per day
- Purpose of usage (entertainment, education, fitness, fashion, communication, etc.)
- Following influencers/celebrities
- Engagement in appearance-related content

This section directly addressed the objective related to assessing the pattern and duration of social media usage.

### 3.8.3 Section C: Body Image Perception

This section evaluated body image perception and level of body dissatisfaction. It included questions related to:

- Satisfaction with body shape and weight
- Frequency of comparing appearance with others on social media
- Feelings after viewing body-related posts
- Perceived social pressure to look a certain way
- Use of filters or photo-editing tools
- Desire to change body weight or shape

A Likert scale format (e.g., strongly agree to strongly disagree) was used for selected items to measure the intensity of perception and dissatisfaction.

### 3.8.4 Section D: Eating Behaviour Assessment

This section focused on identifying eating patterns and dietary practices. It included questions on:

- Meal regularity
- Skipping of meals (especially breakfast)
- Snacking habits
- Consumption of junk/fast foods
- Fruit and vegetable intake
- Following diet trends promoted on social media
- Emotional eating or binge eating behaviour
- Influence of social media on dieting practices

This section helped in examining the influence of social media exposure on eating behaviours.

### 3.8.5 Section E: Awareness of Nutritional Deficiencies

This section assessed participants' knowledge and awareness regarding common nutritional deficiencies. Questions included:

- Awareness of iron, calcium, vitamin D, and protein deficiencies
- Symptoms of common deficiencies
- Sources of nutrition information
- Trust in social media versus healthcare professionals for nutrition advice

This section supported the objective of evaluating nutrition knowledge among teenagers.

### 3.8.6 Section F: Food Frequency Questionnaire (FFQ)

A semi-quantitative Food Frequency Questionnaire was included to assess habitual dietary intake over a specified reference period. The FFQ covered major food groups such as:

- Cereals and millets
- Pulses and legumes
- Milk and milk products
- Eggs, meat, and fish
- Fruits and vegetables
- Fats and oils
- Sugars and processed foods

Frequency categories such as daily, weekly, occasionally, or never were used to estimate consumption patterns.

### 3.8.7 Section G: 24-Hour Dietary Recall

The 24-hour dietary recall method was employed to obtain detailed information about all foods and beverages consumed by the participants during the previous day. Information collected included:

- Meal timing
- Type of food consumed
- Preparation method
- Approximate quantity

Standard household measures were used to estimate portion sizes. This method provided a more accurate assessment of actual dietary intake and complemented the Food Frequency Questionnaire data.

**Plate-1 Research Survey Among Adolescents**

**Plate-2 Survey Assessment of Adolescents**

### Technique of Administration

The questionnaire was administered through **direct face-to-face interaction** within the college premises. Clear instructions were given before distribution. Participants were allowed adequate time to respond independently without discussion. Any doubts were clarified immediately to avoid misinterpretation.

## Scoring Procedure

- Responses related to body image and eating behaviours were scored using Likert scale scoring patterns.
- Knowledge-based questions were scored as correct (1) and incorrect (0).
- Dietary intake data were categorized based on frequency and adequacy levels.

The collected responses were coded systematically for statistical analysis.

### 3.9 Pre-Testing of the Tool

The questionnaire was pre-tested among a small group of teenagers who were not included in the final study. The pre-test helped to assess clarity, relevance, and comprehensibility of the questions. Necessary modifications were made based on the feedback received.

### 3.10 Method of Data Collection

After obtaining permission from the concerned authorities, the purpose of the study was explained to the participants. Informed consent was obtained prior to data collection. The questionnaire was administered in person, and adequate time was provided to complete it. Confidentiality and anonymity of responses were assured.

Data collection was carried out over a period of 2 weeks.

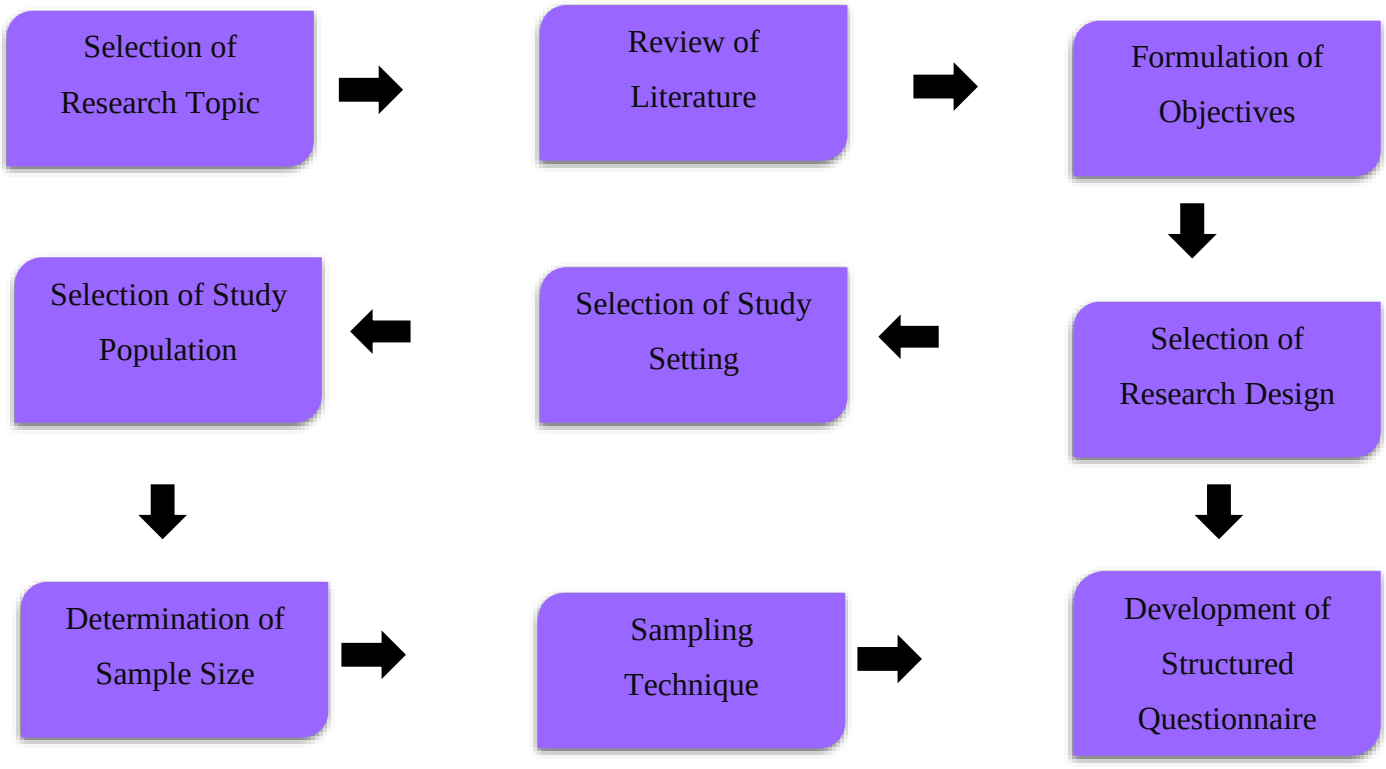
### 3.11 Statistical Analysis

The collected data were coded, tabulated, and analyzed using appropriate statistical techniques. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used. Correlation analysis was applied to determine the relationship between body image perception and eating behaviours. The results were presented using tables and graphs.

### 3.12 Outcome of the Study

Based on the findings of the study, appropriate nutrition education and media literacy strategies were suggested to promote healthy body image perception and positive eating behaviours among teenagers. The outcomes of the study are expected to contribute to better understanding of the influence of social media on adolescents and to support the development of targeted intervention programmes.

**Methodology Flowchart:**



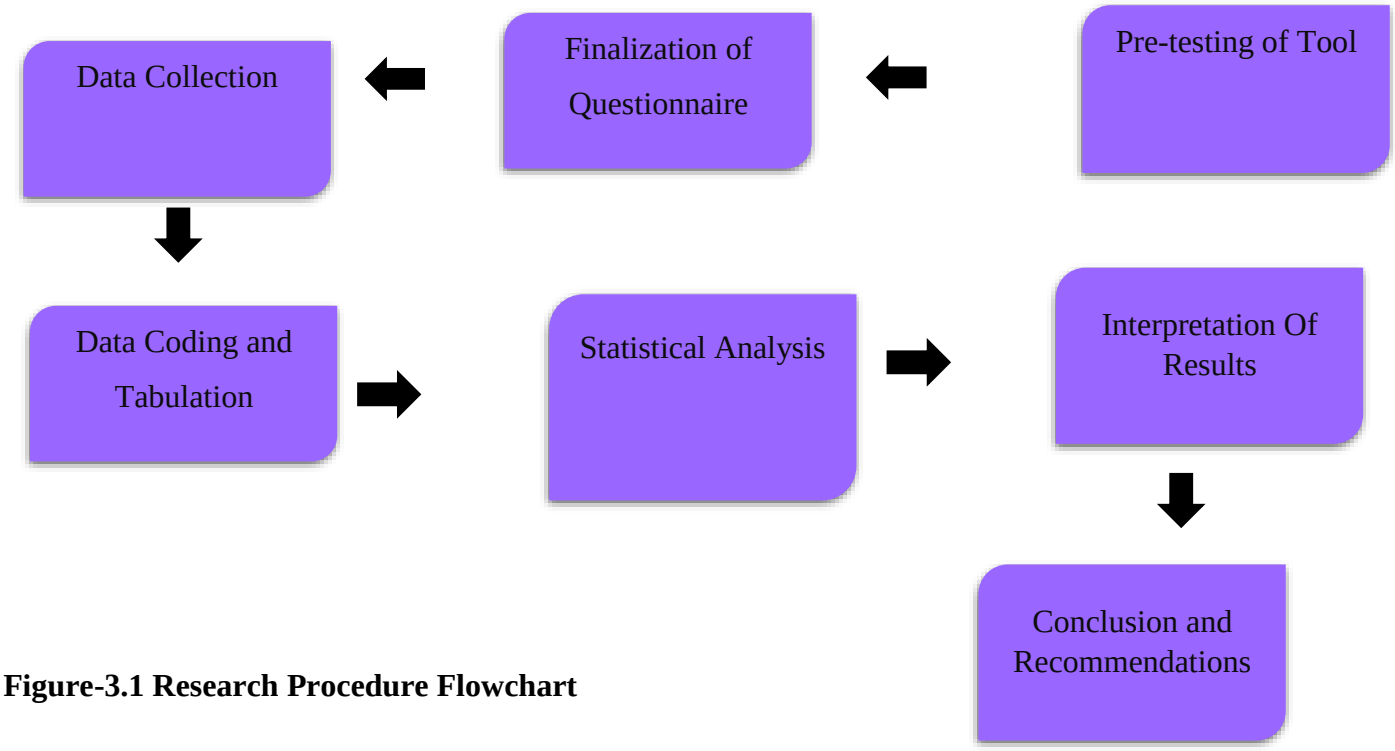



**Figure-3.1 Research Procedure Flowchart**

# CHAPTER-IV

# RESULTS AND DISCUSSION

The data collected for the present study **"A STUDY ON THE EFFECT OF SOCIAL MEDIA INFLUENCES ON BODY IMAGE PERCEPTION, EATING PERFORMANCE, AND AWARENESS OF NUTRITIONAL DEFICIENCIES AMONG ADOLESCENT GIRLS."** were consolidated, tabulated and presented under the following headings.

4.1. Socio-Demographic Profile of the Respondent
4.2. Pattern of Social Media Usage among Teenagers
4.3. Perception of Body Image
4.4. Eating Performance and Dietary Behaviour
4.5. Awareness and Knowledge of Nutritional Deficiencies
4.6. Influence of Social Media and Trust in Information Sources
4.7. Food Frequency Pattern
4.8. 24- Hour Dietary Recall

## 4.1. Socio-Demographic Profile of the Respondents

Socio-demographic characteristics play an important role in shaping adolescents exposure to social media and their perceptions of body image and eating behaviours. Variables such as age, gender, educational level, and family background influence social media usage patterns, food choices, and nutritional awareness. This section presents the socio-demographic profile of the respondents to provide a background for understanding

variations in body image perception, eating performance and awareness of nutritional deficiencies among teenagers.

**1. Gender**

This section indicates that all respondents included in the study were female teenagers, selected to specifically examine the influence of social media on body image perception, eating performance, and nutritional awareness among females.

**TABLE 1**

**Gender-wise profile of the Respondents (n=100)**

| Gender | Per cent |
|---|---|
| Female | 100% |
| Total | 100% |

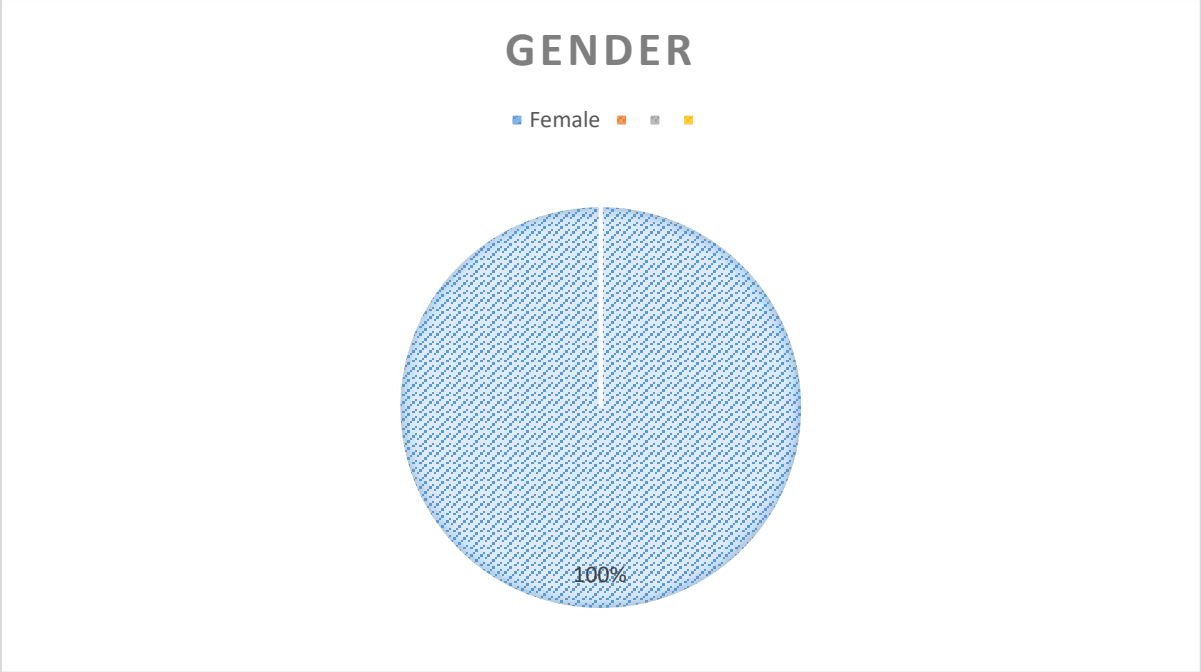



**Figure-4.1 Gender-wise profile of the Respondents**

**Findings**

The table 1 shows that 100 per cent of the respondents included in the study are female. This indicates that the study was exclusively conducted among female teenagers to specifically examine the influence of social media on body image perception, eating performance, and awareness of nutritional deficiencies.

**2. Age**

Age is an important socio-demographic factor in this study, as adolescence (10–19 years), defined by the World Health Organization, is a critical period of physical, emotional, and psychological development.

Differences in age among teenagers may influence their susceptibility to social media effects on body image perception, eating behaviors, and awareness of nutritional deficiencies.

**TABLE 2**

**Age-wise profile of the Respondents (n=100)**

| Age | Per cent |
|---|---|
| 15 - 18 | 36% |
| 19 - 23 | 64% |
| Total | 100% |

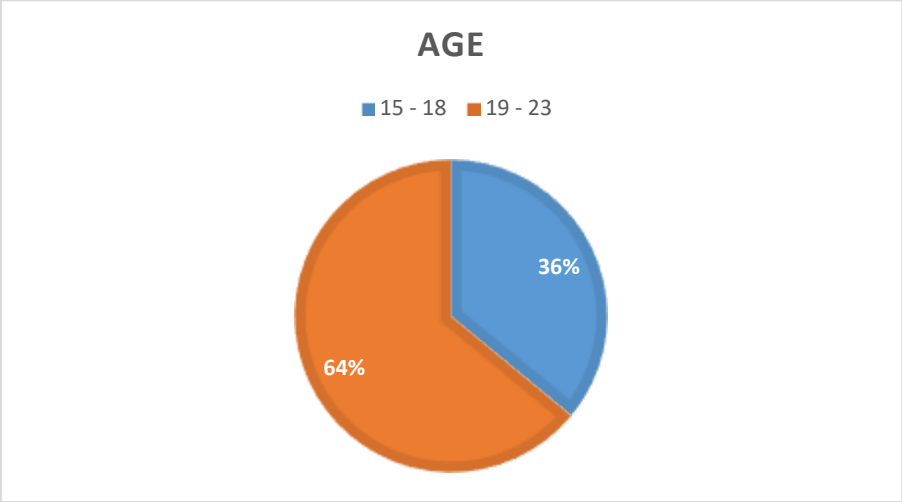



**Figure- 4.2 Age-wise profile of the Respondents**

**Findings**

The table 2 shows that Out of the total 100 respondents, 27% belong to the 15–18 years age group and 48% belong to the 19–23 years age group. This shows that a slightly higher number of participants are older adolescents and young adults. The sample includes both school-level and college-level students, providing balanced representation and helping to better understand the influence of social media on body image perception, eating behaviour, and awareness of nutritional deficiencies among teenagers.

**3. School / College**

The present study was conducted in a school/college that caters to students from diverse socio-demographic backgrounds, including differences in age, gender, socio-economic status, parental education, and area of residence. The institution provides an appropriate academic environment to assess the impact of social media on body image perception, eating behaviours, and awareness of nutritional deficiencies among teenagers.

**Table 3**

**School / college – wise profile of Respondents (n=100)**

| School / College | Per cent |
|---|---|
| School | 20% |
| College | 80% |
| Total | 100% |

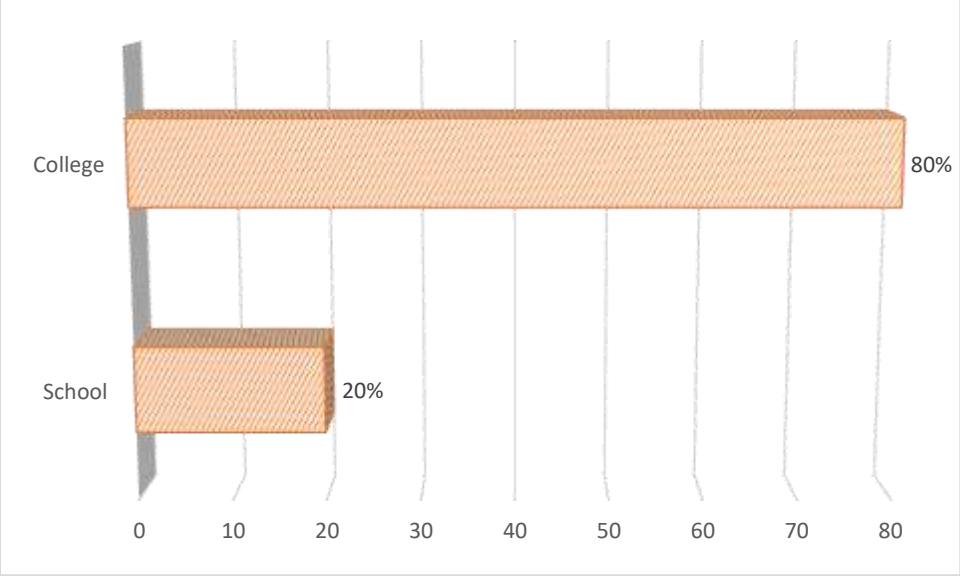



**Figure-4.3 School / college – wise profile of Respondents Findings**

The table 3 shows that, Out of the total 100 respondents, 20% are school students and 80% are college students. This indicates that a higher proportion of participants are from college compared to school. The inclusion of both school and college students provides balanced representation and helps in understanding the influence of social media on body image perception, eating behaviour, and awareness of nutritional deficiencies among teenagers at different educational levels.

## I. Pattern of Social Media Usage among Teenagers

Social media has become an integral part of adolescents' daily lives, influencing the way they communicate, learn, and perceive themselves. With easy access to smartphones and the internet, teenagers spend a considerable amount of time on various social networking platforms for entertainment, interaction, and information sharing. The pattern of social media usage, including frequency, duration, and type of content viewed, plays an important role in shaping their attitudes, behaviours, and lifestyle choices. Therefore, understanding the pattern of social media usage among teenagers is essential to examine its impact on body image perception, eating behaviours, and awareness of nutritional deficiencies.

## 1. Distribution of Respondents Based on Smartphone Usage

Smartphone usage has become an essential part of teenagers' everyday life, serving as a primary tool for communication, social networking, entertainment, academic activities, and accessing online information. With the rapid growth of digital technology, most adolescents rely heavily on smartphones for connecting with peers and engaging with social media platforms. The duration and frequency of smartphone usage may influence their lifestyle habits, self-perception, and health-related behaviours. Therefore, analyzing the distribution of respondents based on smartphone usage is important to understand its possible impact on body image perception, eating behaviours, and awareness of nutritional deficiencies among teenagers.

**Table 4**

**Respondents Based on Smartphone Usage (n=100)**

| Usage | Per cent |
|---|---|
| Yes | 100% |
| No | 0 |
| Total | 100% |

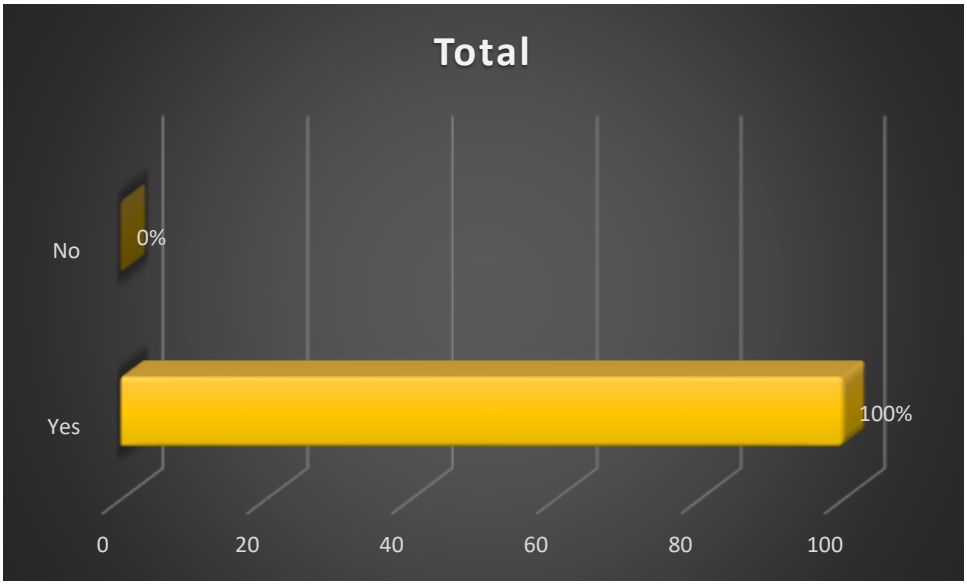



**Figure -4.4 Respondents Based on Smartphone Usage**

**Findings**

The findings reveal that all respondents (100%) reported using social media, while none of the participants (0%) indicated that they do not use it. This shows that social media usage is universal among the selected teenagers in the study. The result highlights the widespread penetration and importance of social media in their daily lives, making it a significant factor in influencing body image perception, eating behaviours, and awareness of nutritional deficiencies.

## 2. Distribution of Respondents According to Daily Screen Time

Daily screen time refers to the amount of time teenagers spend each day using digital devices such as smartphones, tablets, laptops, and computers. Increased screen exposure has become common among adolescents due to the widespread use of social media, online learning, gaming, and entertainment platforms. Understanding the distribution of respondents according to daily screen time helps to evaluate the level of digital engagement and its possible impact on body image perception, eating behaviours, and awareness of nutritional deficiencies among teenagers.

**Table 5**

**Daily Screen Time Pattern of Respondents**

| Screen Time | Per cent |
|---|---|
| <1 hour | 13% |
| 1-2 hours | 16% |
| 2-4 hours | 33% |
| >4 hours | 38% |
| Total | 100% |

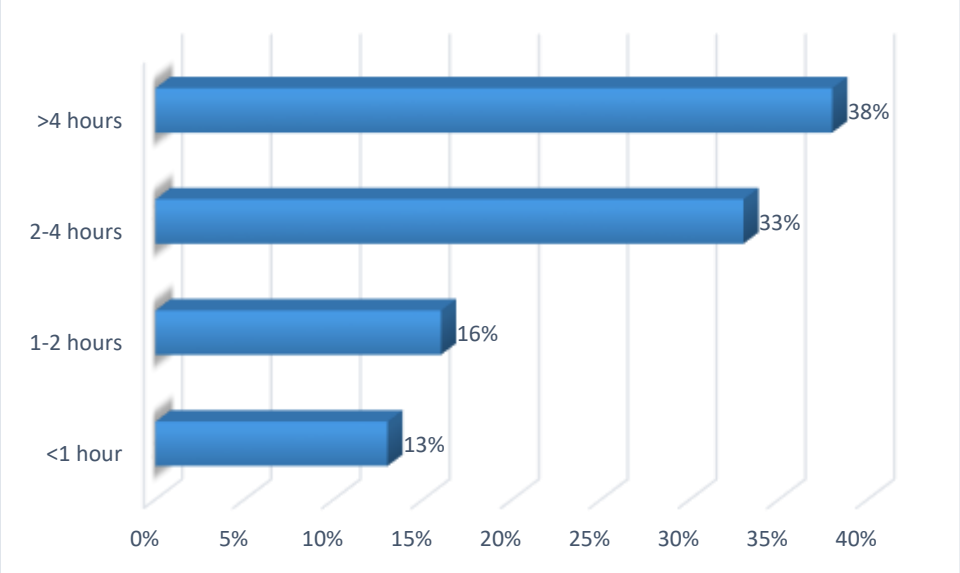



**Figure-4.5 Daily Screen Time Pattern of Respondents**

### Findings

The findings indicate that a majority of respondents spend more than two hours per day on screen-based activities. Specifically, 38% of the teenagers reported spending more than 4 hours daily on screen time, followed by 33% who spend 2–4 hours. A smaller proportion of respondents spend 1–2 hours (16%) and less than 1 hour (13%) per day. This suggests that most teenagers have high daily screen exposure, which may

increase their interaction with social media content and potentially influence their body image perception, eating behaviours, and awareness of nutritional deficiencies.

### 3. Distribution of Respondents Based on Social Media Platforms Used

Different social media platforms offer varied types of content, interaction styles, and levels of engagement, which may influence teenagers in different ways. Adolescents commonly use multiple platforms for sharing photos, watching videos, messaging friends, and following influencers or celebrities. The choice of platform often depends on personal interest, peer influence, and trending digital culture. Therefore, analyzing the distribution of respondents based on the social media platforms used helps to understand the type of content exposure and its potential impact on body image perception, eating behaviours, and awareness of nutritional deficiencies among teenagers.

**Table 6**

**Respondents' Daily Social Media Usage**

| Social Media Platforms | Per cent |
|---|---|
| Instagram | 33% |
| Facebook | 0 |
| Snapchat | 11% |
| Youtube | 39% |
| More than 1 | 17% |

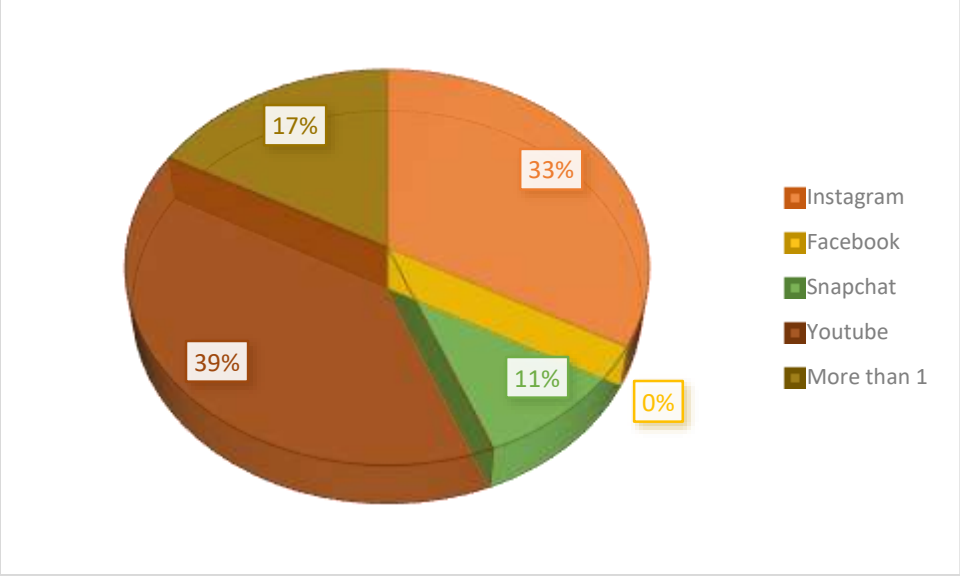



**Figure -4.6 Respondents' Daily Social Media Usage**

**Findings**

The findings reveal that **YouTube (39%)** is the most widely used social media platform among the respondents, indicating a strong preference for video-based content such as entertainment, tutorials, fitness videos, and lifestyle-related information. **Instagram (33%)** is the second most commonly used platform, suggesting significant exposure to image-centered content, including photos, reels, and posts related to beauty, fashion, and body appearance. A notable proportion of teenagers (17%) reported using more than one social media platform, which may increase their overall screen time and content exposure. **Snapchat (11%)** is used by a smaller group of respondents, mainly for communication and sharing short-term visual content. Interestingly, none of the participants reported using **Facebook (0%)**, indicating a shift in preference toward more visually interactive and youth-oriented platforms. Overall, the results suggest that teenagers are more attracted to highly visual and video-based platforms, which may enhance their exposure to appearance-focused and lifestyle-related content, potentially influencing their body image perception, eating behaviours, and awareness of nutritional deficiencies.

## 4. Distribution of Respondents According to Daily Time Spent on Social Media

Daily time spent on social media indicates how much of a teenager's day is devoted to engaging with digital platforms such as messaging apps, photo-sharing sites, and video-based networks. With the increasing availability of smartphones and internet access, many adolescents spend several hours browsing, posting, and interacting online. Prolonged exposure to social media content, especially appearance-related images and lifestyle trends, may shape their body image perceptions and influence their eating habits and health-related choices. Therefore, examining the distribution of respondents according to daily time spent on social media helps to better understand the extent of its influence on body image perception, eating behaviours, and awareness of nutritional deficiencies among teenagers.

**Table 7**

**Purpose of Using Social Media**

| Time spent | Per cent |
|---|---|
| <1 hour | 33% |
| 1 – 2 hour | 37% |
| 2 – 4 hour | 27% |
| >4 hour | 3% |
| Total | 100% |

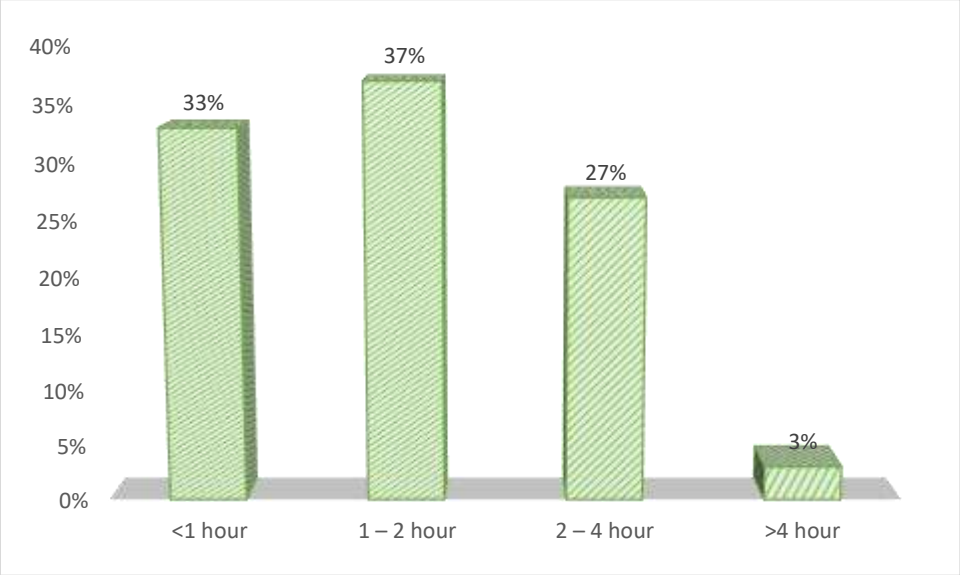



**Figure -4.7 Purpose of Using Social Media**

## Findings

The findings indicate that a considerable proportion of respondents spend a moderate amount of time on social media each day. The highest percentage of teenagers (38%) reported spending 1–2 hours daily on social media, followed closely by 33% who spend less than 1 hour. Additionally, 27% of the respondents spend 2–4 hours per day, showing that more than one-fourth of the participants have relatively high daily exposure. Only a small percentage (3%) reported spending more than 4 hours on social media. Overall, the results suggest that while extreme overuse is limited, a significant number of teenagers are regularly exposed to social media content for one to four hours daily. Such consistent exposure may influence their attitudes, self-image, eating patterns, and awareness regarding nutritional deficiencies, especially when they frequently encounter appearance-focused or lifestyle-related content.

## 5. Distribution of Respondents Based on Purpose of Using Social Media

Social media plays a significant role in the daily routine of teenagers, as it is used for communication, entertainment, educational purposes, news updates, sharing photos and videos, and following celebrities or influencers. The purpose behind using social media can greatly influence the type of content adolescents are exposed to, such as appearance-focused posts, fitness trends, diet culture, or health-related information. These exposures may directly or indirectly shape their body image perception, eating behaviours, and understanding of nutritional needs. Therefore, analyzing the distribution of respondents based on the purpose of using social media helps to identify how different motivations for usage may impact teenagers' physical and psychological well-being.

**Table 8**

**Frequency of Social Media Appearance Comparison**

| Purpose | Per cent |
|---|---|
| Entertainment | 31% |
| Education | 11% |
| Fitness / Health content | 4% |
| Fashion / Beauty | 4% |
| Communication | 4% |
| More than 1 | 46% |
| Total | 100% |

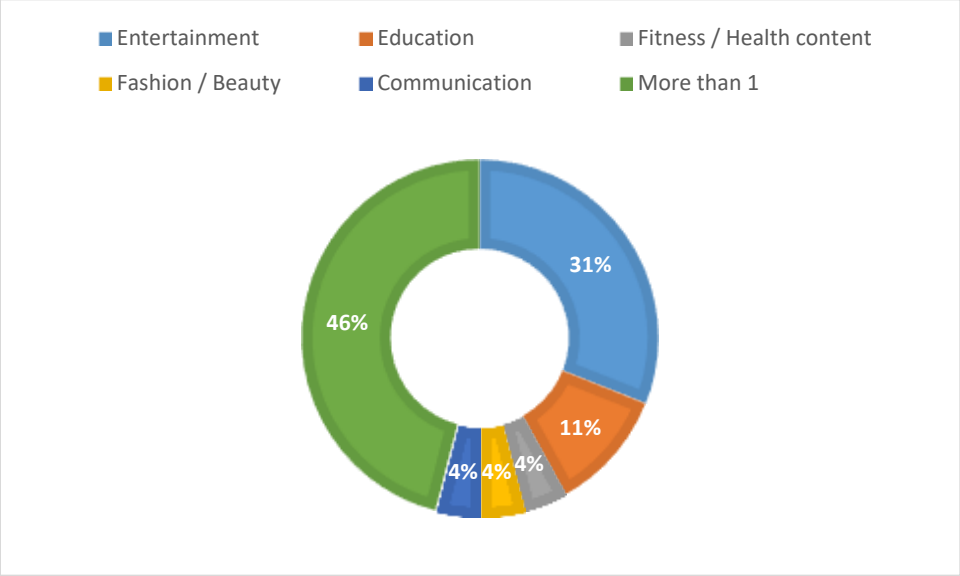



**Figure – 4.8 Frequency of Social Media Appearance Comparison**

## Findings

The findings reveal that nearly half of the respondents (46%) use social media for more than one purpose, indicating that teenagers engage with platforms for multiple activities such as entertainment, communication, education, and lifestyle-related content simultaneously. Among single-purpose users, entertainment is the most common reason (31%), showing that a large proportion of adolescents primarily access social media for leisure activities such as watching videos, browsing posts, and following trends. A smaller percentage of respondents use social media mainly for communication (4%), education (11%), fitness/health content (4%), and fashion/beauty (4%). Although fewer teenagers reported using platforms specifically for fitness or beauty content, exposure to such material may still occur indirectly, especially among those who selected more than one purpose. Overall, the results suggest that social media serves as a multifunctional platform for teenagers. The high proportion of users engaging for multiple purposes increases their exposure to diverse content,

including appearance-focused and lifestyle-related posts, which may influence their body image perception, eating behaviours, and awareness of nutritional deficiencies.

## II. Perception of Body Image

Body image perception refers to an individual's thoughts, feelings, and attitudes toward their own physical appearance, including body shape, size, and overall attractiveness. Adolescence is a critical developmental stage during which teenagers become more conscious of their appearance due to rapid physical changes and increased social comparison. During this period, peer influence, societal expectations, and media portrayals of ideal body standards play a significant role in shaping self-perception. With the widespread use of social media, teenagers are constantly exposed to carefully curated and often unrealistic images of beauty, fitness, and body ideals. Frequent exposure to such content may lead to body dissatisfaction, low self-esteem, and unhealthy eating behaviours. Therefore, understanding the perception of body image among teenagers is crucial in this study to examine how social media influences their self-view, dietary practices, and awareness of nutritional deficiencies.

### 1. Distribution of Respondents based on Frequency of Comparing Appearance with People on Social media

Comparing one's physical appearance with others is a common behaviour during adolescence, as teenagers are highly influenced by peer opinions and social standards. With the increasing use of social media, adolescents are frequently exposed to edited, filtered, and idealized images of friends, celebrities, and influencers. This constant exposure may encourage them to evaluate and compare their own body shape, weight, and overall appearance with others online.The frequency of such comparisons can significantly affect self-esteem, body satisfaction, and mental well-being. Repeated comparison may lead to body dissatisfaction and unhealthy eating practices in an attempt to achieve perceived beauty standards. Therefore, examining the distribution of respondents based on how often they compare their appearance with people on social media is essential to understand its influence on body image perception, eating behaviours, and awareness of nutritional deficiencies among teenagers.**Table 09**

**Respondents' Usage of Different Social Media Platforms**

| Basis of Comparison | Per cent |
|---|---|
| Never | 53% |
| Sometimes | 42% |
| Often | 5% |
| Always | 0% |
| Total | 100% |

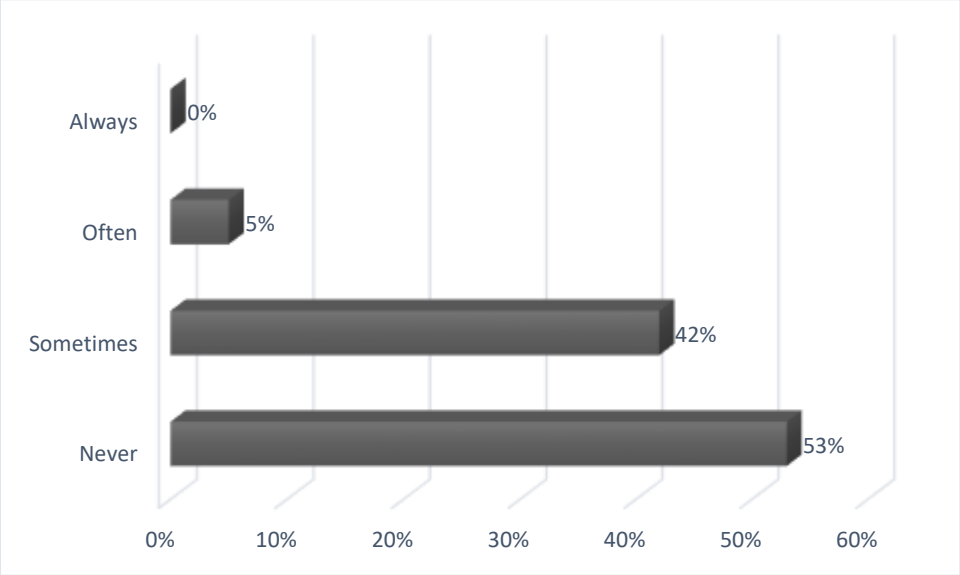



**Figure-4.9 Respondents' Usage of Different Social Media Platforms**

**Findings**

The findings reveal that more than half of the respondents (53%) reported that they **never** compare their appearance with others on social media. This indicates that a considerable proportion of teenagers may not frequently engage in appearance-based comparison, suggesting relatively better body image confidence among this group. However, 42% of the respondents reported that they **sometimes** compare their appearance with others. This shows that a significant number of teenagers are influenced by social media content to some extent, which may affect their body image perception and self-evaluation. A small percentage (5%) reported that they **often** compare their appearance, indicating a higher risk group that may be more vulnerable to body dissatisfaction and unhealthy eating behaviours. Notably, none of the respondents reported **always** comparing their appearance, suggesting that extreme comparison behaviour is not prevalent among the study participants. Overall, while the majority do not frequently engage in comparison, nearly half of the respondents exhibit occasional comparison behaviour, highlighting the subtle yet notable influence of social media on body image perception and related eating practices among teenagers.

**2. Distribution of Respondents Based on Frequency of Viewing Diet, Fitness, and Body shape Content on social media**

The frequency of viewing diet, fitness, and body shape–related content on social media reflects the extent to which teenagers are exposed to appearance-focused messages and health trends online. Regular exposure to such content—often shared on platforms like Instagram, YouTube, and TikTok—may shape adolescents' beliefs about ideal body standards and healthy eating practices. Understanding how often respondents engage with this type of content is essential to assess its influence on body image perception, eating performance, and awareness of nutritional deficiencies among teenagers. This distribution provides insight into whether frequent exposure may contribute to body dissatisfaction, restrictive dieting behaviours, or improved nutrition awareness depending on the nature of the content consumed.

**Table 10**

**Frequency of Viewing Diet, Fitness, and Body Shape Content**

| Basis of Comparison | Per cent |
|---|---|
| Never | 31% |
| Sometimes | 49% |
| Often | 11% |
| Always | 9% |
| Total | 100% |

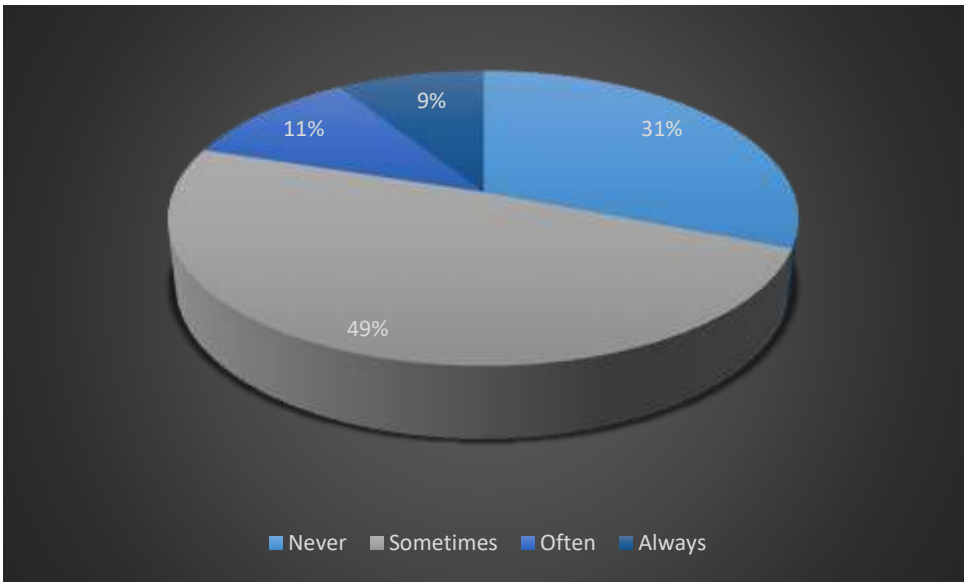



**Figure-4.10 Frequency of Viewing Diet, Fitness, and Body Shape Content**

**Findings**

The table 10 indicate that nearly half of the respondents (49%) **sometimes** view diet, fitness, and body shape–related content on social media, showing that moderate exposure to appearance-focused content is common among teenagers. This suggests that many adolescents are regularly influenced by online information related to body standards and dieting practices. About 31% of the respondents reported that they **never** view such content, indicating that a considerable proportion of teenagers may not actively engage with diet and body shape–focused media. However, 11% stated that they **often** view this type of content, and 9% reported that they **always** engage with it. Together, nearly one-fifth of the respondents (20%) are frequently exposed to diet and fitness-related content, which may increase their risk of body dissatisfaction, unhealthy eating performance, or excessive concern about body shape. Overall, the findings reveal that while occasional exposure is most common, a notable proportion of teenagers are frequently engaging with diet and body shape content, highlighting the potential influence of social media on body image perception and nutritional awareness.

### 3. Distribution of Respondents Based on Satisfaction with Body Shape and appearance

Satisfaction with body shape and appearance plays a crucial role in determining adolescents' psychological well-being and health behaviours. During the teenage years, individuals become more conscious of physical appearance, and this awareness is often influenced by the images and standards portrayed on social media platforms. Evaluating the level of satisfaction among respondents provides insight into the extent of body image acceptance or dissatisfaction within the study group. This information is essential to understand how social media influences body image perception, eating performance, and awareness of nutritional deficiencies among teenagers.

**Table 11**

**Body Shape Satisfaction of Respondents**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 68% |
| No | 13% |
| Sometimes | 19% |
| Total | 100% |

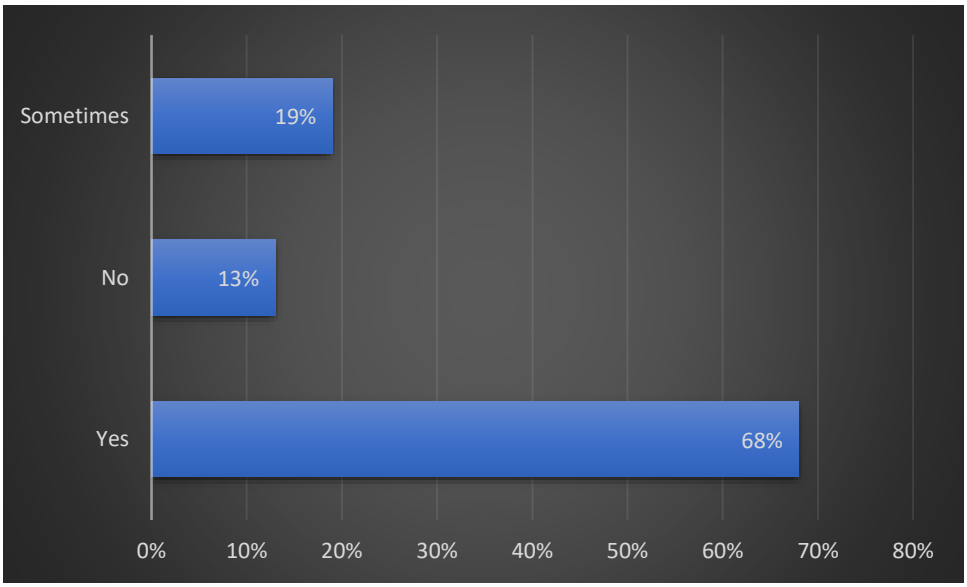



**Figure-4.11 Body Shape Satisfaction of Respondents**

**Findings**

The findings show that a majority of the respondents (68%) reported that they are **satisfied** with their body shape and appearance. This indicates that most teenagers in the study possess a positive body image

perception, which may contribute to better self-esteem and healthier eating behaviours. However, 19% of the respondents reported that they are **sometimes satisfied**, suggesting occasional body dissatisfaction. This group may experience fluctuating feelings about their appearance, possibly influenced by social media exposure or peer comparison. Additionally, 13% of the respondents reported that they are **not satisfied** with their body shape and appearance. This indicates that a notable proportion of teenagers may be at risk of body image concerns, which could negatively affect their eating performance and overall nutritional health. Overall, while the majority demonstrate body satisfaction, nearly one-third of the respondents show varying degrees of dissatisfaction, highlighting the need for promoting positive body image and nutrition awareness among teenagers.

### 4. Distribution of Respondents based on perceived pressure from social media to look a certain way

Perceived pressure from social media to look a certain way has emerged as a significant psychosocial factor influencing adolescents' body image and health behaviours. Social media platforms frequently promote idealized body standards through edited photos, influencer content, fitness trends, and beauty filters, which may create unrealistic expectations regarding physical appearance. Teenagers, who are in a critical stage of identity formation and self-concept development, are particularly vulnerable to internalizing these ideals. Exposure to curated and appearance-focused content on platforms such as Instagram, TikTok, and Snapchat can intensify the desire to conform to socially accepted beauty standards. Continuous engagement with such content may lead adolescents to compare themselves with influencers, celebrities, or peers, thereby increasing feelings of inadequacy or dissatisfaction with their own bodies. Assessing the distribution of respondents based on their perceived pressure from social media is essential to understand the psychological impact of digital exposure. This variable provides valuable insight into how strongly teenagers feel compelled to alter their appearance, adopt dieting practices, or change their eating behaviours in response to online influences. Understanding this perception of pressure is crucial in examining the broader effect of social media on body image perception, eating performance, and awareness of nutritional deficiencies among teenagers.

**Table 12**

**Perceived Social Media Appearance Pressure**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 19% |
| No | 52% |
| Sometimes | 29% |
| Total | 100% |

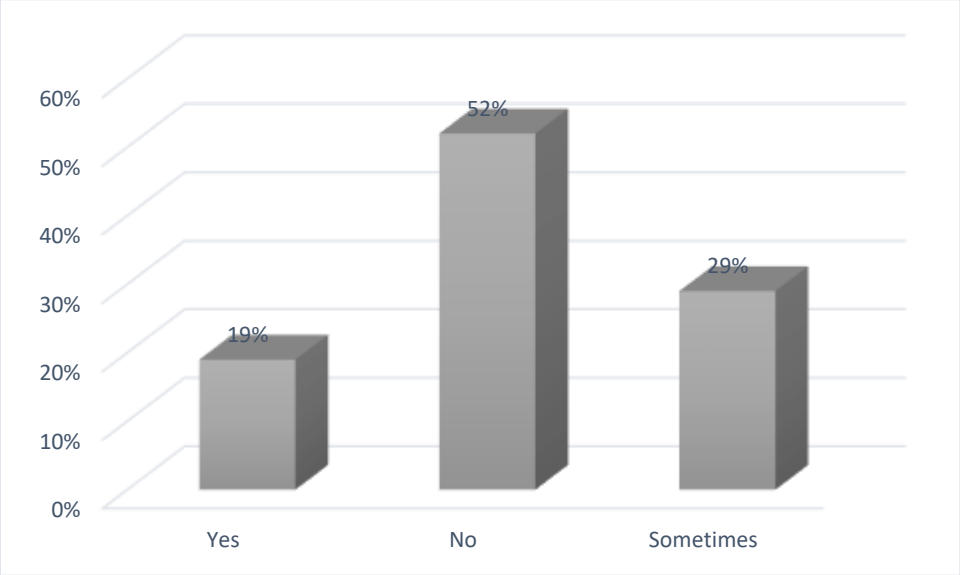



**Figure-4.12 Perceived Social Media Appearance Pressure**

**Findings**

The Table 12 reveal that more than half of the respondents (52%) reported **not experiencing pressure** from social media to look a certain way. This suggests that a majority of teenagers in the study may not strongly internalize appearance-related standards promoted online. However, 29% of the respondents reported **sometimes feeling pressure**, indicating that nearly one-third of the participants are moderately influenced by social media expectations regarding body shape and appearance. This group may be vulnerable to occasional body dissatisfaction or changes in eating behaviour due to perceived social comparison. Additionally, 19% of the respondents reported **experiencing pressure** from social media to look a certain way. Although this represents a smaller proportion, it highlights a significant subgroup of teenagers who may be at higher risk of developing negative body image perceptions, unhealthy dieting practices, or concerns about nutritional adequacy. Overall, while the majority do not perceive strong pressure from social media, nearly half of the respondents (48%) experience at least some level of pressure, emphasizing the continued influence of social media on body image perception and related health behaviours among teenagers.

**5. Distribution of Respondents Based on Social media influence on Dieting or Fitness changes**

Social media plays a significant role in shaping adolescents' attitudes toward dieting and fitness practices. With increasing exposure to transformation posts, workout routines, diet trends, and influencer recommendations, teenagers may feel motivated or pressured to modify their eating habits and physical activity patterns. Assessing the distribution of respondents based on social media influence on dieting or fitness changes helps to understand how online content contributes to behavioural modifications. This variable is important in examining whether social media exposure encourages healthy lifestyle improvements or promotes unhealthy dieting practices, thereby affecting body image perception, eating performance, and awareness of nutritional deficiencies among teenagers.

**Table 13**

**Social Media Effect on Dieting and Fitness**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 31% |
| No | 69% |
| Total | 100% |

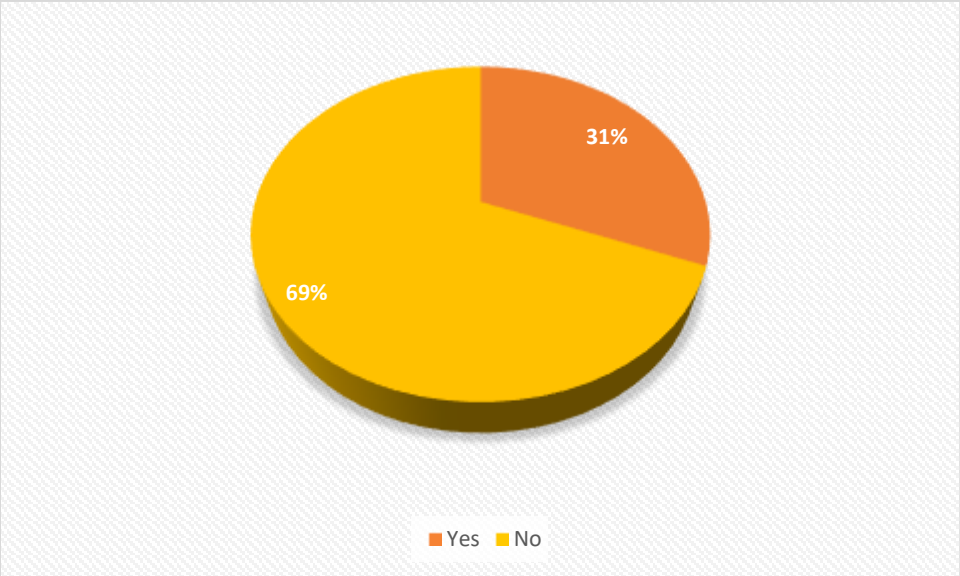



**Figure-4.13 Social Media Effect on Dieting and Fitness**

## Findings

The findings indicate that a majority of the respondents (69%) reported that social media has **not influenced** them to make dieting or fitness changes. This suggests that most teenagers in the study may not directly modify their eating habits or physical activity patterns based on social media content. It reflects a level of independence in their lifestyle choices despite exposure to online diet and fitness trends. However, 31% of the respondents reported that social media **has influenced** them to make changes in their dieting or fitness practices. This highlights that nearly one-third of the participants are impacted by online content such as diet plans, workout routines, body transformation posts, or influencer recommendations. While such influence may sometimes encourage positive lifestyle improvements, it may also lead to restrictive dieting, skipping meals, excessive exercise, or imbalanced nutritional intake if not guided properly. Overall, although the majority are not directly influenced, a considerable proportion of teenagers do report behavioural changes due to social media exposure. This finding emphasizes the importance of promoting nutrition education and media literacy to ensure that adolescents adopt healthy and scientifically sound diet and fitness practices.

## 6. Distribution of Respondents Based on Frequency of Negative Feelings About appearance after using social media

The experience of negative feelings about appearance after using social media is an important indicator of its psychological impact on adolescents. Continuous exposure to idealized images, edited photos, and appearance-focused content may lead teenagers to feel dissatisfied, insecure, or self-conscious about their own bodies. Assessing the frequency of such negative feelings among respondents helps to understand the emotional consequences of social media use. This variable is crucial in examining how social media influences body image perception, eating performance, and awareness of nutritional deficiencies among teenagers.

**Table 14**

**Frequency of Appearance-Related Negative Feelings**

| Basis of Comparison | Per cent |
|---|---|
| Never | 61% |
| Rarely | 19% |
| Sometimes | 20% |
| Often | 0 |
| Total | 100% |

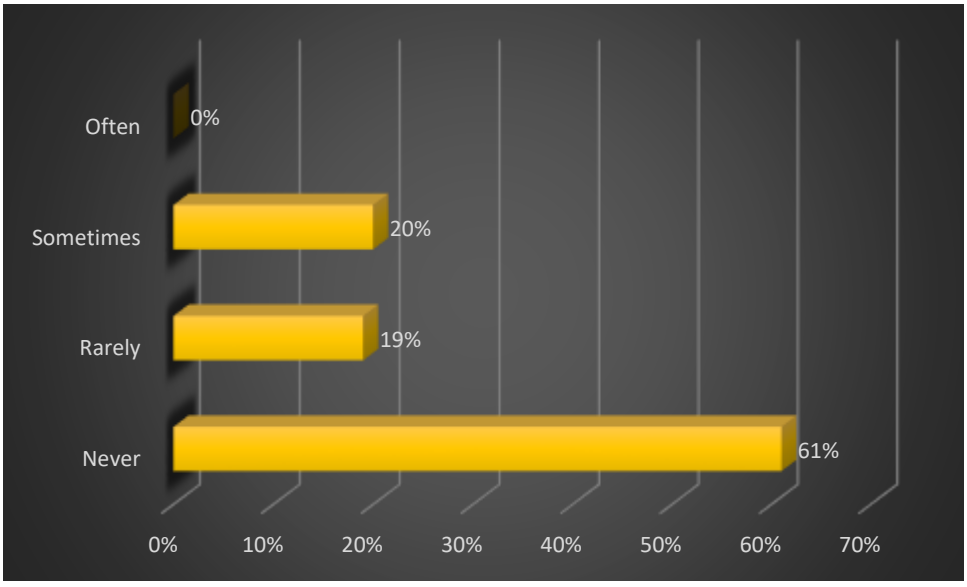



**Figure 4.14 Frequency of Appearance-Related Negative Feelings**

**Findings**

The findings show that a majority of the respondents (61%) reported that they **never** experience negative feelings about their appearance after using social media. This suggests that most teenagers in the study may not be emotionally affected by appearance-related content, indicating relatively stable body image perception

among this group. However, 20% of the respondents reported that they **sometimes** experience negative feelings, while 19% reported **rarely** feeling this way. Together, nearly 39% of the participants experience occasional negative emotions related to their appearance after social media use. This indicates that although severe emotional impact is not widespread, a considerable proportion of teenagers are still vulnerable to body dissatisfaction or self-consciousness at times. Notably, none of the respondents reported **often** experiencing negative feelings, suggesting that persistent or intense emotional distress related to social media exposure is not common within the study group. Overall, while the majority demonstrate emotional resilience, the presence of occasional negative feelings among a significant minority highlights the subtle yet meaningful influence of social media on body image perception and related health behaviours among teenagers.

## 7. Distribution of Respondents based on Editing or Filtering before posting

Editing or filtering photos before posting on social media has become a common practice among adolescents as part of managing their online identity. Many teenagers use built-in filters, beauty effects, or third-party editing tools to enhance their appearance before sharing images on platforms such as Instagram, Snapchat, and TikTok. These digital modifications often aim to align personal images with socially accepted beauty standards. Frequent editing or filtering may reflect concerns about body image, fear of negative judgment, or the desire for social approval in the form of likes and comments. Therefore, analysing the distribution of respondents based on their editing or filtering behaviour provides valuable insight into the level of appearance consciousness among teenagers. This variable is closely linked to body image perception, self-esteem, and potentially to eating behaviours influenced by the pressure to achieve an “ideal” look.

**Table 15**

**Respondents’ Photo Editing Before Posting**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 51% |
| No | 49% |
| Total | 100% |

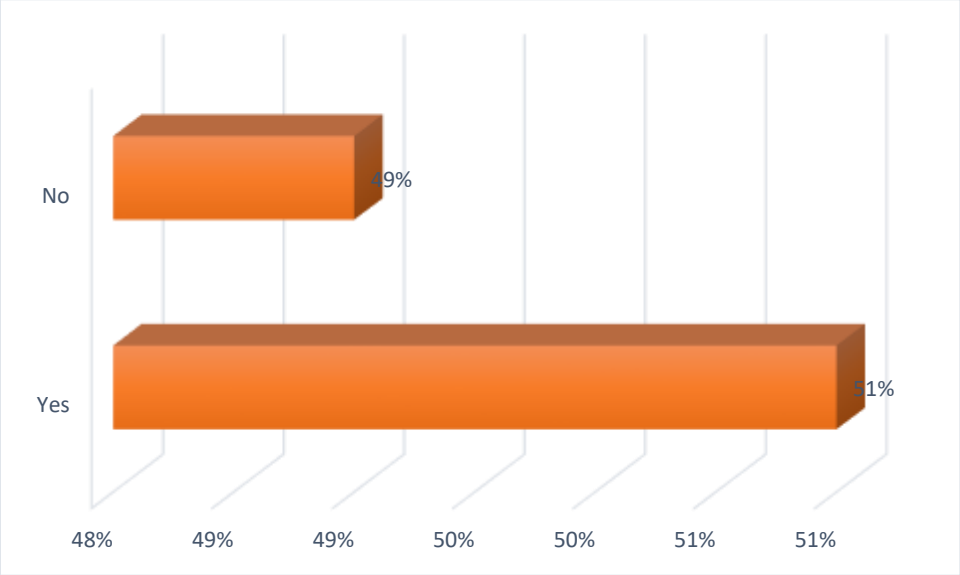



**Figure-4.15 Respondents' Photo Editing Before Posting**

**Findings**

The findings reveal that 51% of the respondents reported **editing or filtering** their photos before posting on social media, while 49% reported that they **do not** engage in such practices. This indicates an almost equal distribution between teenagers who modify their images and those who present their photos without alterations. The fact that slightly more than half of the respondents use editing or filtering suggests a notable level of appearance consciousness among adolescents. This behaviour may reflect a desire to enhance physical features, meet perceived beauty standards, or gain social approval in the form of likes and positive comments. Such practices can sometimes be associated with body image concerns or pressure to conform to idealized online images. On the other hand, nearly half of the respondents reported not editing or filtering their photos, which may indicate greater body acceptance, confidence, or reduced concern about external validation. Overall, the findings suggest that photo editing is a common but not universal behaviour among teenagers. The near-equal distribution highlights the growing influence of social media on self-presentation while also indicating that a substantial proportion of adolescents maintain authenticity in their online appearance.

## III. Eating Performance and Dietary Behaviour

Eating performance and dietary behaviour are important components of overall health and well-being, particularly among adolescents and young adults. Eating performance refers to the pattern, frequency, and quality of food intake, including meal regularity, portion size, and food choices. Dietary behaviour, on the other hand, encompasses the attitudes, habits, and practices related to food consumption, such as preference for healthy or unhealthy foods, snacking patterns, emotional eating, and dieting practices. During adolescence, individuals undergo rapid physical, psychological, and social changes that significantly influence their eating habits. According to World Health Organization, healthy dietary practices during adolescence are essential for

proper growth, development, and prevention of future non-communicable diseases. However, exposure to media, peer pressure, body image concerns, and academic stress can negatively affect eating behaviour, leading to irregular meals, skipping breakfast, increased consumption of fast foods, and unhealthy dieting patterns. In recent years, the influence of social media platforms such as Instagram and TikTok has further shaped food choices and body image perceptions. Constant exposure to idealized body standards and diet trends may contribute to restrictive eating, emotional eating, or disordered eating behaviours among teenagers and young adults. Understanding eating performance and dietary behaviour is therefore essential to identify unhealthy patterns and develop appropriate nutrition education and intervention strategies. This section focuses on assessing the eating habits, food preferences, meal patterns, and behavioural factors influencing dietary practices among the study population.

## 1. Distribution of Respondents based on Regularity of Daily Meals

Teenagers who are frequently exposed to idealized body standards, diet trends, and fitness content on platforms such as Instagram and YouTube may develop concerns about their body image. These concerns can sometimes lead to unhealthy practices such as skipping meals, irregular eating patterns, restrictive dieting, or excessive control over food intake. Such behaviours may negatively impact their nutritional status and increase the risk of nutritional deficiencies. Therefore, assessing the distribution of respondents based on the regularity of daily meals helps to understand how social media influence and body image perception are reflected in their eating performance. This analysis provides valuable insight into whether teenagers maintain consistent meal patterns or engage in irregular eating behaviours that may affect their health and well-being.

**Table 16**

**Respondents by Daily Meal Regularity**

| Basis of Comparison | Per cent |
|---|---|
| Very regular | 35% |
| Sometimes irregular | 57% |
| Mostly Irregular | 8% |
| Total | 100% |

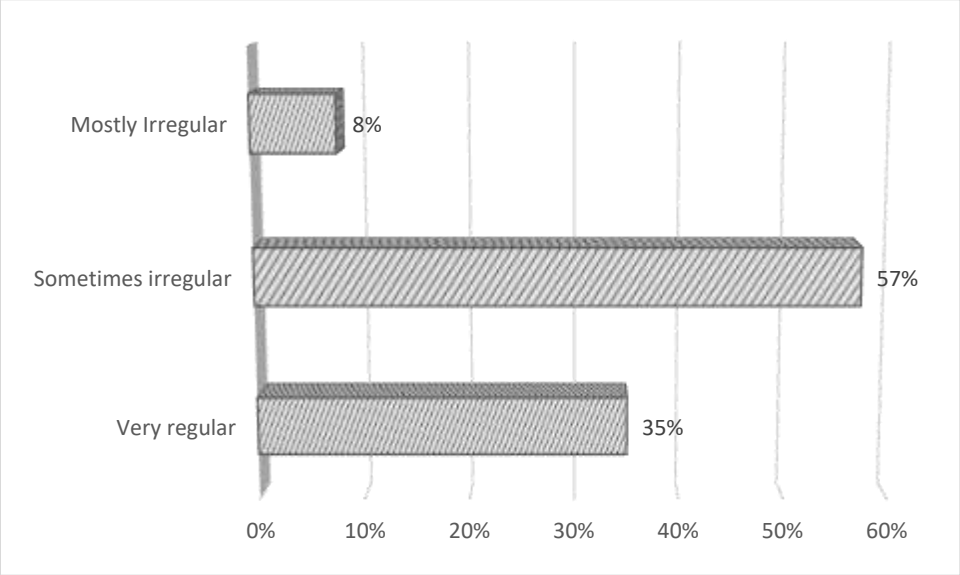



**Figure-4.16 Respondents by Daily Meal Regularity**

**Findings**

The table16 reveal that out of 100 respondents, **35 (35%)** reported that they are *very regular* in consuming their daily meals. This indicates that only about one-third of the teenagers consistently maintain proper meal timing and structured eating habits. A majority of the respondents, **57 (57%)**, reported being *sometimes irregular* in their daily meals. This suggests that more than half of the teenagers do not consistently follow a fixed meal pattern and may occasionally skip meals or delay eating. Such irregularity may be influenced by factors like academic workload, screen time, and social media exposure, which can alter routine habits and food choices. Additionally, **68respondents (8%)** stated that they are *mostly irregular* in their meal consumption. Although this percentage is relatively small, it is still concerning, as persistent irregular eating habits during adolescence can negatively affect nutritional status and may increase the risk of deficiencies. Overall, the findings indicate that a significant proportion (65.33%) of teenagers experience some level of irregularity in their daily meals. This pattern may reflect the influence of social media, body image concerns, and lifestyle factors on eating performance, highlighting the need for nutrition education and awareness programs to promote regular and balanced meal practices among teenagers.

**2. Distribution of Respondents Based on Frequency of Skipping Meals**

With the growing influence of social media platforms such as Instagram, Snapchat, and YouTube, teenagers are frequently exposed to idealized body images, fitness trends, and dieting practices. Continuous exposure to such content may lead to body dissatisfaction and the adoption of unhealthy weight-control behaviours, including skipping meals to achieve a desired body shape. In addition, prolonged screen time may disrupt daily routines, resulting in irregular eating schedules and missed meals. Skipping meals during adolescence can have significant consequences. This developmental stage requires adequate and balanced nutrient intake to support rapid physical growth, hormonal changes, and cognitive development. Irregular food consumption

may reduce energy levels, impair concentration and academic performance, and increase the risk of micronutrient deficiencies. Therefore, analysing the distribution of respondents based on the frequency of skipping meals helps to understand the extent to which social media influence and body image perception are associated with unhealthy eating practices. The findings from this section will provide insight into the dietary behaviour of teenagers and highlight the need for targeted nutrition education and media awareness programs to promote healthier meal patterns.

**Table 17**

**Respondents by Meal Skipping Frequency**

| Basis of Comparison | Per cent |
|---|---|
| Never | 29% |
| Sometimes | 64% |
| Often | 5% |
| Always | 2% |
| Total | 100% |

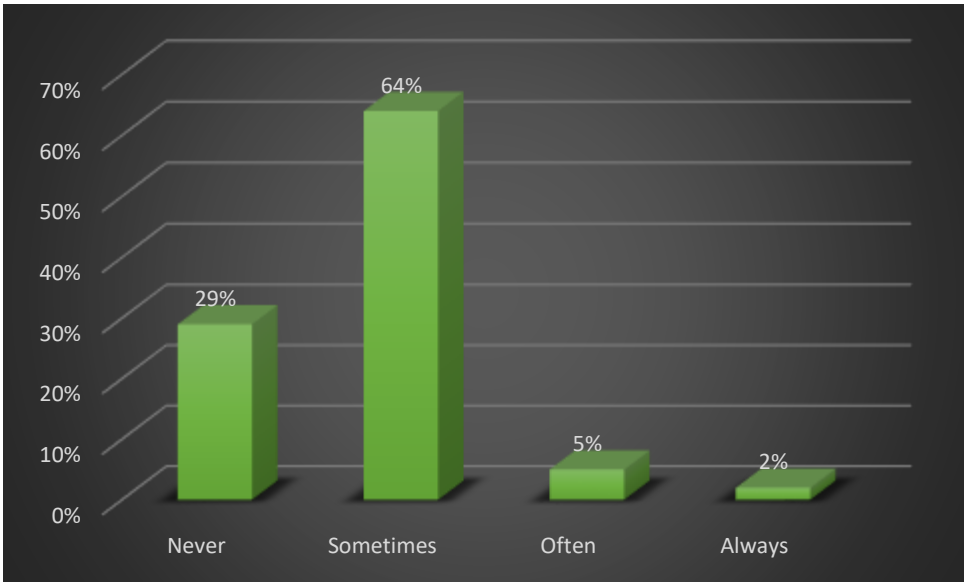



**Figure-4.17 Respondents by Meal Skipping Frequency**

**Findings**

The findings indicate that out of 100 respondents, **29 (29%)** reported that they never skip meals. This shows that less than one-third of the teenagers maintain consistent meal consumption without skipping, reflecting relatively healthy eating behaviour in this group. A majority of the respondents, **64 (64%)**, stated that they *sometimes* skip meals. This suggests that irregular eating patterns are highly prevalent among the teenagers in the study. Occasional meal skipping may be influenced by academic workload, prolonged screen time, social

media engagement, or body image concerns. Although not frequent, repeated occasional skipping can still negatively affect nutritional intake and overall health. Furthermore, **5 respondents (5%)** reported that they *often* skip meals, while **2 respondent (2%)** indicated that they *always* skip meals. Though these percentages are relatively low, they are concerning because frequent meal skipping during adolescence can lead to inadequate nutrient intake, reduced energy levels, poor concentration, and increased risk of nutritional deficiencies. Overall, the findings reveal that **70.66% of respondents (sometimes, often, and always combined)** skip meals to some extent. This highlights a significant level of irregular eating behaviour among teenagers, which may be associated with social media influence, body image perception, and lifestyle factors. The results emphasize the need for nutrition education and awareness programs to encourage regular meal consumption and prevent potential health consequences.

### 3. Distribution of Respondents based on Following Diets Learned from social media

Through platforms such as Instagram, TikTok, and YouTube, adolescents are continuously exposed to influencers, celebrities, and peers promoting specific diet patterns such as low-carb diets, detox cleanses, intermittent fasting, calorie-restricted plans, and "what I eat in a day" trends. These diets are often presented as quick solutions for weight loss or achieving an ideal body shape, which may strongly impact teenagers who are already sensitive about their body image. Adolescence is a critical period of growth that requires adequate intake of macronutrients and micronutrients. However, teenagers may adopt these trending diets without scientific understanding or professional supervision, driven by body dissatisfaction, comparison culture, or the desire for social acceptance. Such practices may disrupt normal eating patterns, reduce dietary diversity, and increase the risk of nutritional deficiencies, particularly iron, calcium, and essential vitamins. Therefore, analysing the distribution of respondents based on whether they follow diets learned from social media helps to determine the level of digital influence on their dietary behaviour. This section provides insight into how online exposure may shape teenagers' food choices, eating performance, and awareness regarding the importance of balanced nutrition.

**Table 18**

**Respondents Following Social Media Diet Trends**

| Basis of Comparison | Per cent |
|---|---|
| Never | 43% |
| Sometimes | 49% |
| Often | 5% |
| Always | 3% |
| Total | 100% |

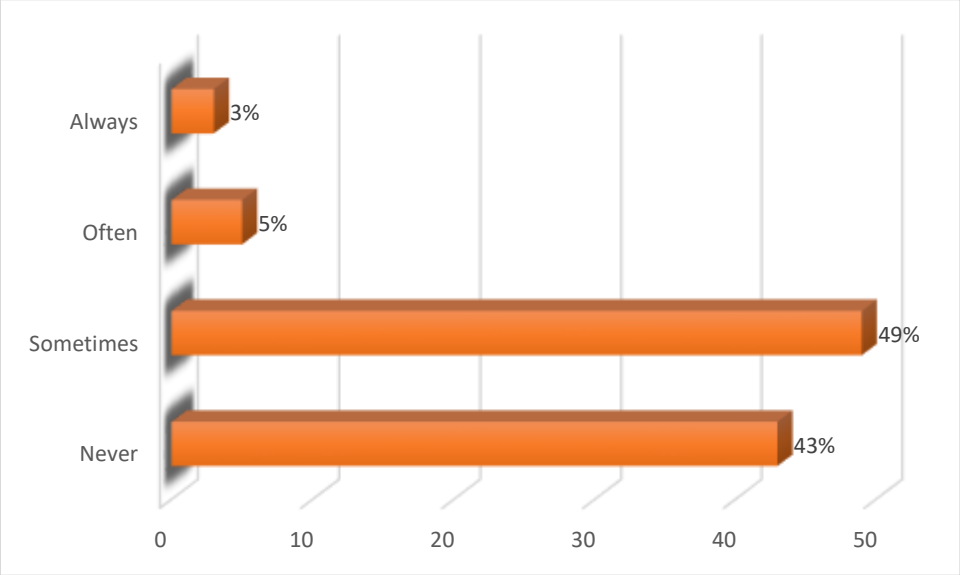



**Figure-4.18 Respondents Following Social Media Diet Trends**

**Findings**

The findings show that out of 100 respondents, **43 (43%)** reported that they *never* follow diets learned from social media. This indicates that nearly two-fifths of the teenagers do not rely on social media platforms for adopting dietary practices, suggesting a relatively independent or cautious approach toward online diet trends. However, **49 respondents (49%)** stated that they *sometimes* follow diets learned from social media. This represents the largest proportion of the study population. It suggests that almost half of the teenagers are influenced by online diet content at least occasionally. Such behaviour may be associated with exposure to body ideals, fitness influencers, or trending diet challenges, which can shape their eating performance and food choices. Additionally, **5 respondents (5%)** reported that they *often* follow diets from social media, while **3 respondents (2%)** stated that they *always* follow such diets. Although these percentages are relatively small, they are noteworthy because frequent reliance on unverified online diet plans may increase the risk of inadequate nutrient intake and nutritional deficiencies. Overall, the findings reveal that **57.33% of respondents (sometimes, often, and always combined)** follow diets learned from social media to some extent. This indicates a considerable level of digital influence on teenagers' dietary behaviour, which may impact their eating performance and nutritional health. The results highlight the importance of promoting nutrition education and media literacy programs to help adolescents critically evaluate online diet information and adopt healthy, balanced eating practices.

**4. Distribution of Respondents Based on Frequency of Daily Fruits and Vegetable Consumption**

Fruits and vegetables are major sources of essential micronutrients such as iron, calcium, vitamin A, vitamin C, folate, and dietary fiber. Insufficient consumption may increase the risk of nutritional deficiencies, weakened immunity, fatigue, and long-term health complications. According to the World Health Organization, regular consumption of fruits and vegetables is crucial for preventing micronutrient deficiencies

and reducing the risk of non-communicable diseases later in life. However, modern lifestyle changes and increasing engagement with digital media may influence teenagers' food preferences. Social media platforms such as Instagram, YouTube, and TikTok frequently display both healthy eating trends and highly processed, visually appealing fast foods. Teenagers may be influenced by food marketing, influencer promotions, or viral food challenges, which can either encourage healthier choices or promote high-calorie, low-nutrient foods over fruits and vegetables. Furthermore, body image concerns influenced by social media exposure may also impact dietary patterns. Some teenagers may restrict overall food intake, including nutrient-rich fruits and vegetables, in pursuit of weight control, while others may adopt short-term diet trends that lack dietary diversity. Therefore, analysing the distribution of respondents based on the frequency of daily fruit and vegetable consumption provides insight into the quality of their dietary behaviour and nutritional awareness. This assessment helps determine whether teenagers are meeting recommended dietary practices and highlights the potential relationship between social media influence, eating performance, and the risk of nutritional deficiencies.

**Table 19**

**Respondents Following Social Media Diet Trends**

| Basis of Comparison | Per cent |
|---|---|
| Rarely | 25% |
| 1-2 times per week | 31% |
| 3-4 times per week | 24% |
| Almost daily | 20% |
| Total | 100% |

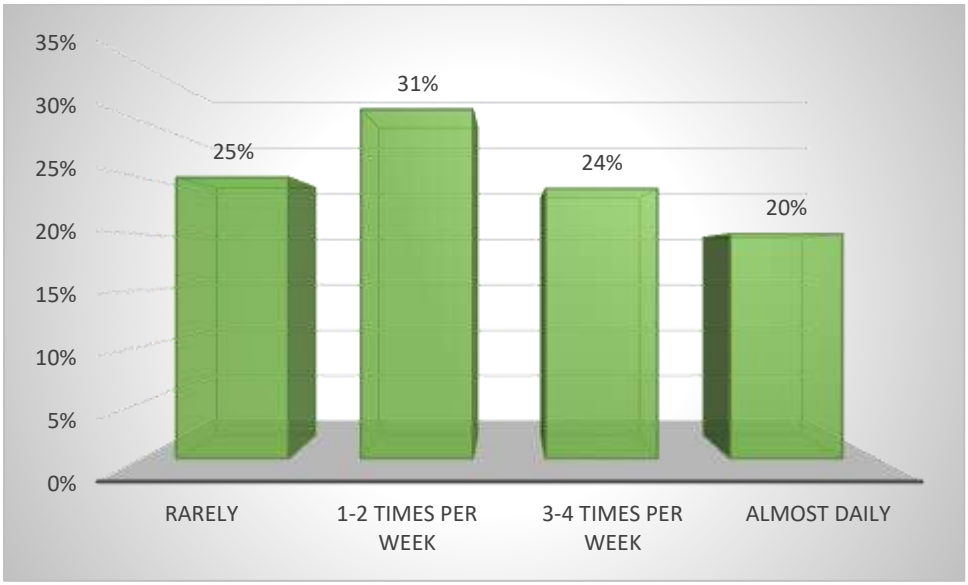



**Figure-4.19 Respondents Following Social Media Diet Trends**

**Findings**

The findings indicate varied patterns in the consumption of fruits and vegetables among the respondents. Out of 100 teenagers, **25 (25%)** reported that they *rarely* consume fruits and vegetables. This suggests that one-fourth of the respondents have very low intake of nutrient-rich foods, which may increase their risk of micronutrient deficiencies and poor overall dietary quality. A slightly higher proportion, **31 respondents (31%)**, stated that they consume fruits and vegetables *1–2 times per week*. This represents the largest group in the distribution. However, this frequency is still below the recommended daily intake suggested by the World Health Organization, indicating inadequate consumption among a significant portion of the study population. Further, **24 respondents (24%)** reported consuming fruits and vegetables *3–4 times per week*. Although this reflects moderate intake, it still does not meet the ideal standard of daily consumption required during adolescence for optimal growthS and prevention of nutritional deficiencies. Only **20 respondents (20%)** indicated that they consume fruits and vegetables *almost daily*. This shows that just one-fifth of the teenagers maintain a near-regular intake of these essential food groups, reflecting relatively better dietary behaviour. Overall, the findings reveal that **80% of the respondents do not consume fruits and vegetables on an almost daily basis**, highlighting inadequate dietary practices among the majority of teenagers. This pattern may be influenced by lifestyle factors, food preferences shaped by social media exposure, and limited awareness regarding the importance of balanced nutrition. The results emphasize the need for nutrition education and awareness programs to promote regular consumption of fruits and vegetables and to prevent potential nutritional deficiencies.

**5. Distribution of Respondents Based on Skipping Meals Due to Body Image Concerns**

With the increasing use of social media platforms such as Instagram, TikTok, and Snapchat, teenagers are constantly exposed to idealized and often unrealistic body images. Continuous comparison with influencers, celebrities, and peers may lead to body dissatisfaction, low self-esteem, and a desire to alter body shape or weight. As a result, some teenagers may intentionally skip meals as a weight-control strategy. Skipping meals due to body image concerns can negatively affect eating performance and overall nutritional status. During adolescence, adequate and balanced nutrition is essential to support growth, hormonal development, and cognitive functioning. Intentional meal skipping may result in reduced energy levels, impaired concentration, and increased risk of nutritional deficiencies. Therefore, assessing the distribution of respondents based on skipping meals due to body image concerns helps to understand the psychological impact of social media on dietary behaviour. This analysis provides insight into the relationship between body image perception and unhealthy eating practices among teenagers.

**Table 20**

**Respondents Skipping Meals for Body Image**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 9% |
| No | 63% |
| Sometimes | 28% |
| Total | 100% |

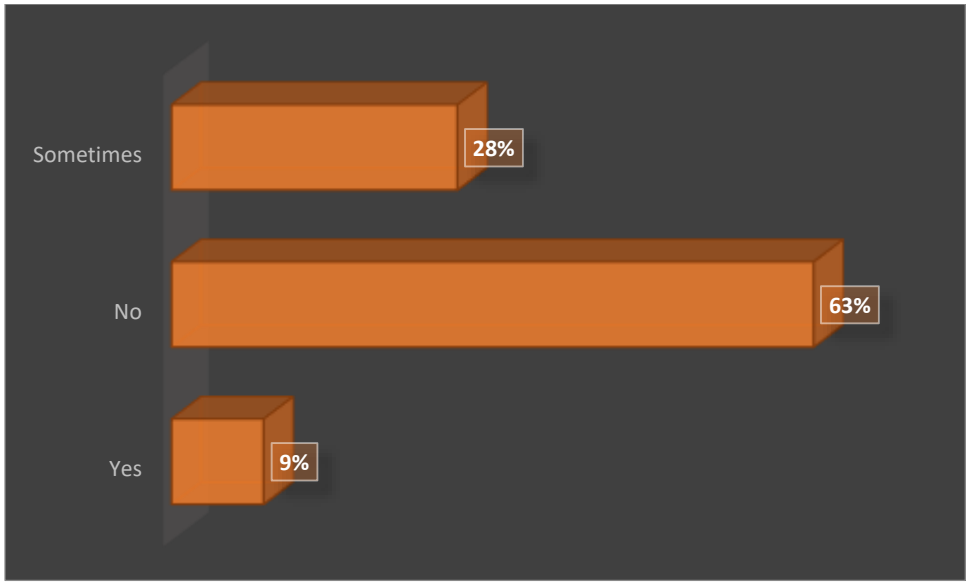



**Figure-4.20 Respondents Skipping Meals for Body Image**

**Findings**

The findings reveal that out of 100 respondents, **63 (63%)** reported that they *do not* skip meals due to body image concerns. This indicates that the majority of teenagers in the study are not directly engaging in meal-skipping behaviour as a result of dissatisfaction with their appearance. However, **28 respondents (28%)** stated that they *sometimes* skip meals due to body image concerns. This represents more than one-fourth of the study population and suggests that body image perception does influence eating behaviour for a considerable number of teenagers. Occasional meal skipping motivated by appearance-related concerns may reflect the impact of social comparison and exposure to idealized body standards on social media. Additionally, **9 respondents (9.33%)** reported that they *do* skip meals due to body image concerns. Although this percentage is relatively small, it is significant because intentional meal skipping as a weight-control practice can negatively affect nutritional intake and overall health during adolescence. Overall, the findings show that **37% of respondents (Yes and sometimes combined)** skip meals due to body image concerns to some extent. This highlights a noticeable psychological influence of body image on eating performance among teenagers. The results

emphasize the need for body positivity awareness, media literacy education, and nutrition counselling to prevent unhealthy dieting behaviours and reduce the risk of nutritional deficiencies.

## 6. Distribution of Respondents Based on Frequency of Junk food consumption

In the present study on the effect of social media influences on body image perception, eating performance, and awareness of nutritional deficiencies among teenagers, the frequency of junk food consumption is assessed as an important indicator of dietary behaviour and nutritional quality. Junk foods, which are typically high in calories, sugar, salt, and unhealthy fats but low in essential nutrients, can negatively affect the overall health and nutritional status of adolescents. Teenagers are particularly vulnerable to unhealthy food choices due to peer influence, convenience, taste preferences, and increased exposure to digital media. Social media platforms such as Instagram, YouTube, and TikTok frequently promote fast foods through advertisements, influencer marketing, and viral food trends. Continuous exposure to such content may shape food preferences and increase cravings for energy-dense, nutrient-poor foods. Excessive junk food consumption during adolescence can contribute to poor eating performance, weight gain, reduced intake of fruits and vegetables, and an increased risk of nutritional deficiencies. It may also indirectly affect body image perception, either by contributing to weight concerns or by triggering unhealthy dieting practices. Therefore, analysing the distribution of respondents based on the frequency of junk food consumption helps to understand the quality of their dietary habits and the potential influence of social media on their food choices. This assessment provides insight into how lifestyle and media exposure may impact teenagers' nutritional health and overall well-being.

**Table 21**

**Respondents by Junk Food Consumption Frequency**

| Basis of Comparison | Per cent |
|---|---|
| Rarely | 50% |
| 1-2 times per week | 27% |
| 3-4 times per week | 15% |
| Almost daily | 8% |
| Total | 100% |

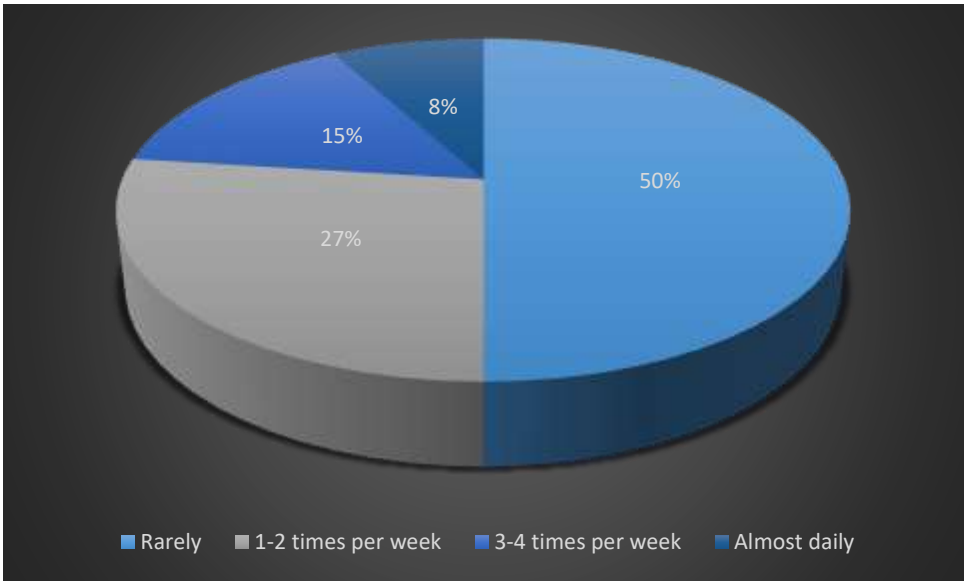



**Figure-4.21 Respondents by Junk Food Consumption Frequency**

**Findings**

The findings reveal varying patterns of junk food consumption among the respondents. Out of 100 teenagers, **50 (50%)** reported that they consume junk food *rarely*. This indicates that more than half of the respondents limit their intake of junk foods, reflecting comparatively healthier eating behaviour within this group. However, **27 respondents (27%)** stated that they consume junk food *1–2 times per week*. While this may not indicate excessive intake, regular weekly consumption of energy-dense and nutrient-poor foods can gradually affect overall dietary quality and nutritional balance. Further, **15 respondents (15%)** reported consuming junk food *3–4 times per week*, and **8 respondents (8%)** indicated that they consume junk food *almost daily*. These findings are concerning, as frequent consumption of junk food may lead to inadequate intake of essential nutrients, increased risk of weight gain, and higher chances of developing nutritional deficiencies during adolescence. Overall, the results show that **49.34% of respondents consume junk food at least once a week or more**, highlighting a significant proportion of teenagers who regularly include unhealthy food items in their diet. This pattern may be influenced by lifestyle habits, peer pressure, convenience, and exposure to food-related content on social media. The findings emphasize the importance of promoting balanced dietary practices and increasing awareness about the long-term health effects of excessive junk food consumption among teenagers.

## 7. Distribution of Respondents based on Emotional Influence on eating behaviour

Emotional eating refers to changes in food intake triggered by feelings such as stress, sadness, anxiety, boredom, or happiness rather than physical hunger. Teenagers who experience body dissatisfaction or social comparison—often intensified by exposure to social media platforms such as Instagram and TikTok—may develop unhealthy coping mechanisms related to food. Some may overeat high-calorie comfort foods, while others may restrict or skip meals during periods of emotional distress. Frequent emotional influence on eating

behaviour can disrupt normal eating performance, reduce dietary quality, and increase the risk of nutritional imbalances. It may also contribute to unhealthy weight control practices and long-term disordered eating patterns. Therefore, analysing the distribution of respondents based on emotional influence on eating behaviour helps to understand the psychological impact of social media and body image concerns on teenagers' dietary habits. This assessment provides insight into how emotional factors shape eating performance and overall nutritional well-being among adolescents.

**Table 22**

**Respondents by Emotional Eating Influence**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 16% |
| No | 45% |
| Sometimes | 39% |
| Total | 100% |

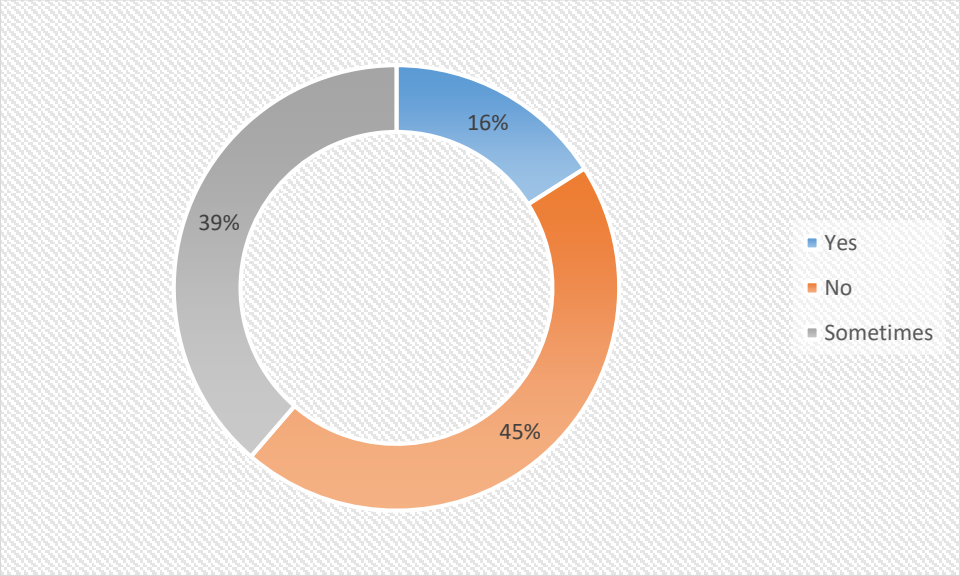



**Figure-4.22 Respondents by Emotional Eating Influence**

**Findings**

The findings indicate that out of 100 respondents, **45 (45%)** reported that their eating behaviour is *not* influenced by emotions. This suggests that nearly half of the teenagers are able to maintain relatively stable eating patterns regardless of emotional changes. However, **39 respondents (39%)** stated that their eating behaviour is *sometimes* influenced by emotions. This represents a considerable proportion of the study population. Occasional emotional influence may lead to irregular eating patterns such as overeating, undereating, craving junk foods, or skipping meals during periods of stress, sadness, or anxiety. Additionally, **16 respondents (16%)** reported that their eating behaviour *is influenced* by emotions. Although this group is

smaller compared to others, it is significant because consistent emotional influence on eating may negatively affect dietary quality and increase the risk of unhealthy eating patterns. Overall, the findings reveal that **55% of respondents (Yes and Sometimes combined)** experience emotional influence on their eating behaviour to some extent. This highlights the psychological component of eating performance among teenagers and suggests that emotional factors—possibly intensified by social media exposure and body image concerns—play an important role in shaping dietary habits. The results emphasize the need for emotional well-being support and nutrition education programs to promote healthy coping strategies and balanced eating practices.

### E. **Awareness and Knowledge of Nutritional Deficiencies**

Adolescence is a critical period of rapid growth and development that requires adequate intake of macro and micronutrients. However, due to irregular eating patterns, peer influence, body image concerns, stress, and increased exposure to social media, adolescents are at high risk of developing nutritional deficiencies. Common deficiencies during this stage include iron deficiency anemia, calcium deficiency, vitamin D deficiency, and protein-energy malnutrition. Lack of awareness about balanced diets and healthy food choices further increases this risk. In the present study, which focuses on stress, eating behaviour, and body image among adolescents/college students, assessing awareness and knowledge of nutritional deficiencies is highly relevant. Poor nutrition knowledge may contribute to unhealthy eating habits such as skipping meals, frequent consumption of junk foods, restrictive dieting, or emotional eating. These behaviours can negatively affect physical health, academic performance, and psychological well-being. Moreover, social media exposure often promotes unrealistic body ideals, which may influence food choices and dieting practices. Without proper knowledge about essential nutrients and the consequences of deficiencies, adolescents may adopt unhealthy dietary patterns in an attempt to modify their body image. Therefore, evaluating the level of awareness regarding causes, symptoms, prevention, and dietary sources of essential nutrients becomes important. This section of the study aims to assess the respondents' understanding of common nutritional deficiencies, their causes, signs and symptoms, and preventive dietary measures. The findings will help identify knowledge gaps and support the development of nutrition education and intervention programs to improve dietary behaviour and overall health among adolescents.

#### 1. Distribution of Respondents based on Awareness of Common Nutritional Deficiencies

Awareness of common nutritional deficiencies plays a crucial role in maintaining good health, especially during adolescence and early adulthood, which are periods of rapid growth and increased nutritional requirements. Deficiencies such as iron deficiency anemia, vitamin D deficiency, calcium deficiency, and protein-energy malnutrition are prevalent among adolescents due to poor dietary habits, irregular meal patterns, and increased consumption of processed foods. Adequate knowledge about these deficiencies helps individuals make informed food choices and adopt preventive dietary practices. In the context of the present study, which examines stress, eating behaviour, and body image among students, assessing awareness of

common nutritional deficiencies is essential. Limited awareness may contribute to unhealthy eating patterns such as meal skipping, crash dieting, or excessive intake of junk food, thereby increasing the risk of nutrient inadequacy. Conversely, higher awareness may encourage healthier food selections and balanced dietary practices. Therefore, this section presents the distribution of respondents based on their level of awareness regarding common nutritional deficiencies. The analysis helps to identify the proportion of students who are knowledgeable and those who lack adequate understanding, thereby providing insight into the need for targeted nutrition education and intervention programs.

**Table 23**

**Respondents' Awareness of Nutritional Deficiencies**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 57% |
| No | 17% |
| Not sure | 26% |
| Total | 100% |

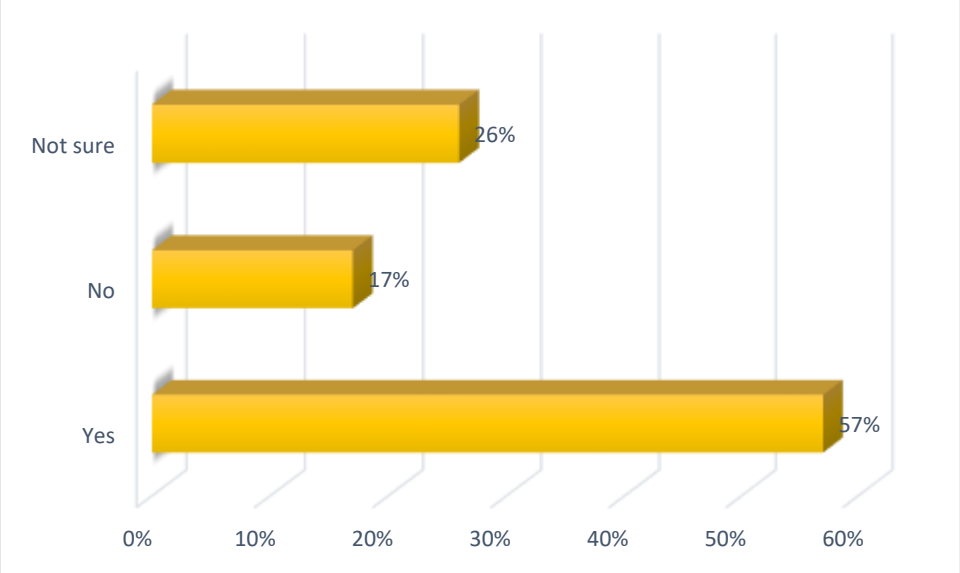



**Figure-4.23 Respondents' Awareness of Nutritional Deficiencies**

**Findings**

The above table presents the distribution of respondents based on their awareness of common nutritional deficiencies. Out of the total 100 respondents, 57 students (57%) reported that they are aware of common nutritional deficiencies. This indicates that more than half of the participants possess some level of knowledge regarding deficiencies such as iron deficiency anemia, vitamin deficiencies, and other nutrition-related problems. However, 26 respondents (26%) reported that they are not sure about their awareness. This suggests that a considerable proportion of students may have limited or unclear understanding of nutritional deficiencies, which could affect their dietary choices and health practices. Additionally, 17 respondents (17%)

stated that they are not aware of common nutritional deficiencies. Although this represents a smaller group, it still highlights a knowledge gap within the study population. Overall, while the majority of respondents demonstrate awareness, the presence of uncertainty and lack of knowledge among nearly 43% of participants (combined "No" and "Not sure") indicates the need for strengthened nutrition education programs to improve understanding and prevent nutrition-related health issues among students.

## 2. Distribution of Respondents based on Deficiencies known

This table shows the distribution of respondents based on their knowledge of the meaning of nutritional deficiencies. Nutritional deficiency refers to the condition that occurs when the body does not receive adequate amounts of essential nutrients such as vitamins, minerals, proteins, or energy required for proper growth and health. From the responses collected, it was observed that a majority of the respondents were aware of the meaning of nutritional deficiencies, indicating a basic level of nutritional knowledge among them. However, a smaller proportion of respondents had limited or no understanding of the concept, which highlights the need for increased nutrition education and awareness programs. Improving knowledge about nutritional deficiencies is important for promoting healthy dietary practices and preventing deficiency-related health problems.

**Table 24**

**Respondents by Knowledge of Deficiencies**

| Basis of Comparison | Per cent |
|---|---|
| Iron | 24% |
| Calcium | 23% |
| Vitamin D | 19% |
| Protein | 21% |
| More than 1 | 13% |
| Total | 100% |

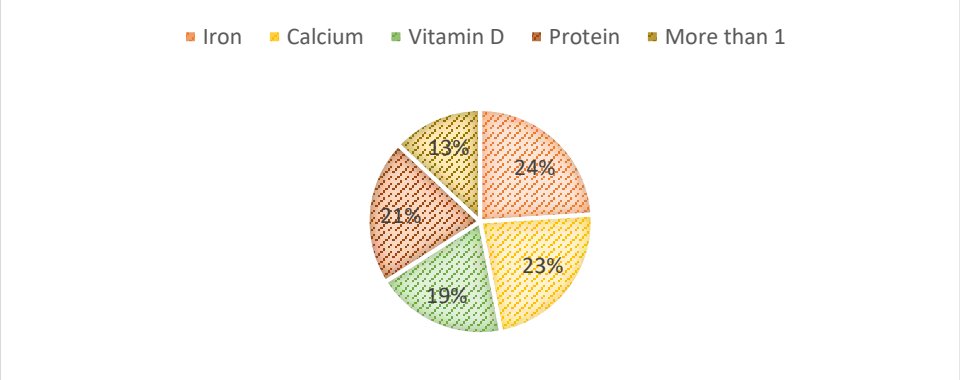



**Figure-4.24 Respondents by Knowledge of Deficiencies**

**Findings**

The above table presents the distribution of respondents based on the type of nutritional deficiencies they are aware of. Among the 100 respondents, 18 students (24%) reported awareness of iron deficiency, making it the most commonly identified deficiency. This may indicate relatively better recognition of iron deficiency anemia among the study population. Seventeen respondents (22.67%) were aware of calcium deficiency, while 16 respondents (21.33%) identified protein deficiency. Additionally, 14 respondents (18.67%) reported awareness of vitamin D deficiency. These findings suggest that knowledge regarding different types of nutritional deficiencies is moderately distributed among students. Only 10 respondents (13.33%) indicated awareness of more than one nutritional deficiency. This comparatively lower percentage shows that comprehensive knowledge about multiple deficiencies is limited among the participants. Overall, the findings reveal that while students are somewhat aware of specific individual deficiencies, broader and more integrated knowledge about various nutritional deficiencies remains inadequate. This highlights the need for enhanced nutrition education programs to improve overall awareness and understanding.

### 3. Distribution of Respondents based on Sources of information on Nutritional Deficiencies

Access to accurate and reliable information plays a vital role in improving awareness and prevention of nutritional deficiencies. Adolescents and college students receive nutrition-related information from various sources such as teachers, textbooks, healthcare professionals, family members, social media platforms, television, and the internet. However, the quality and credibility of these sources may vary, which can influence their understanding, attitudes, and dietary practices. In the present study, which examines stress, eating behaviour, body image, and nutritional awareness among students, identifying the primary sources of information on nutritional deficiencies is important. Social media and online content may sometimes provide misleading or incomplete nutrition information, potentially affecting food choices and dieting behaviours. On the other hand, formal education and guidance from health professionals may promote accurate knowledge and healthier lifestyle practices. Therefore, this section presents the distribution of respondents based on their sources of information regarding nutritional deficiencies. The findings will help determine whether students rely more on credible sources or informal channels, thereby highlighting the need for structured nutrition education and awareness programs.

**Table 25**

**Sources of Information on Nutritional Deficiencies**

| Basis of Comparison | Per cent |
|---|---|
| Social media | 22% |
| School / Teacher | 27% |
| Parents | 11% |
| Doctors | 10% |
| Friends | 11% |
| Others | 19% |
| Total | 100% |

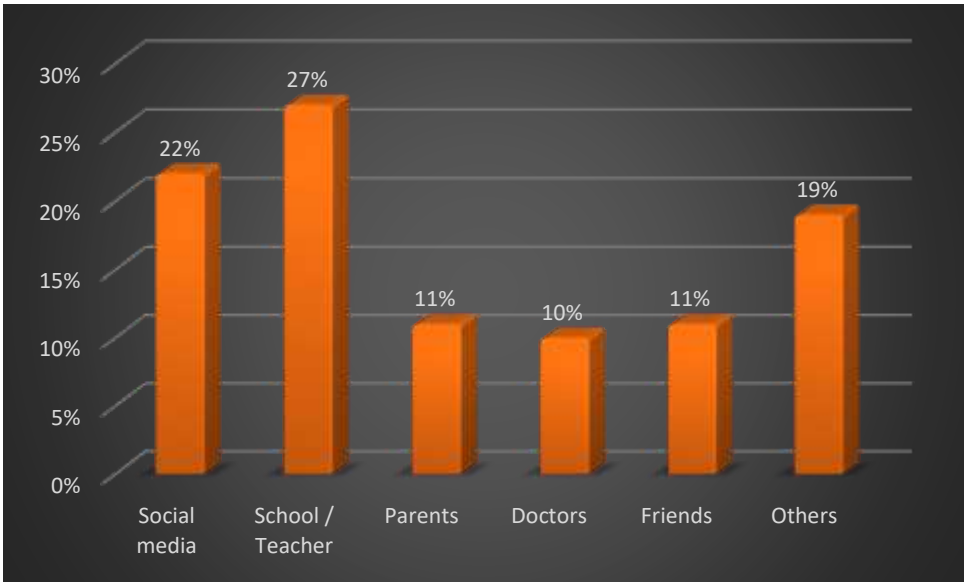



**Figure-4.25 Sources of Information on Nutritional Deficiencies**

**Findings**

The above table shows the distribution of respondents based on their sources of information on nutritional deficiencies. Among the 100 respondents, the majority 27 students (27%) reported that they receive information from school or teachers. This indicates that formal education plays a significant role in creating awareness about nutritional deficiencies. Seventeen respondents (22%) identified social media as their primary source of information, showing that digital platforms also contribute substantially to nutrition awareness among students. However, the reliability of such information may vary depending on the source. A smaller proportion of respondents, 11 students each (11%), reported parents, doctors, and friends as their sources of information. This suggests that while family members, healthcare professionals, and peer groups do influence knowledge, their role appears comparatively limited. Additionally, 19 respondents (19%) mentioned other sources, which may include television, internet websites, books, or community programs. Overall, the findings

indicate that schools and social media are the dominant sources of information on nutritional deficiencies among the respondents. This highlights the importance of strengthening school-based nutrition education and ensuring accurate nutrition content on social media platforms to improve awareness levels.

**4. Distribution of Respondents based on Perception of social media in increasing Nutritional Awareness**

Social media has become a major platform for sharing health and nutrition-related information, especially among adolescents and college students. Platforms such as Instagram, YouTube, and Facebook frequently feature content on healthy eating, diet trends, fitness routines, and prevention of nutritional deficiencies. These platforms have the potential to improve awareness by making information easily accessible and visually engaging. However, while social media can serve as an educational tool, it may also spread misinformation, promote unrealistic body standards, or encourage unhealthy dieting practices. The perception of students regarding whether social media genuinely enhances their nutritional knowledge is therefore an important aspect to assess. Their views may influence how they interpret and apply nutrition-related information in their daily lives. In the context of the present study, which focuses on stress, eating behaviour, body image, and nutritional awareness, understanding respondents' perceptions about the role of social media in increasing nutritional awareness is highly relevant. This section presents the distribution of respondents based on their perception of social media as a source of nutritional education. The findings will help determine whether social media is viewed as a positive educational influence or as a potentially misleading source, thereby guiding future nutrition education and media literacy interventions.

**Table 26**

**Perception of Social Media on Nutritional Awareness**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 50% |
| No | 25% |
| To some extent | 25% |
| Total | 100% |

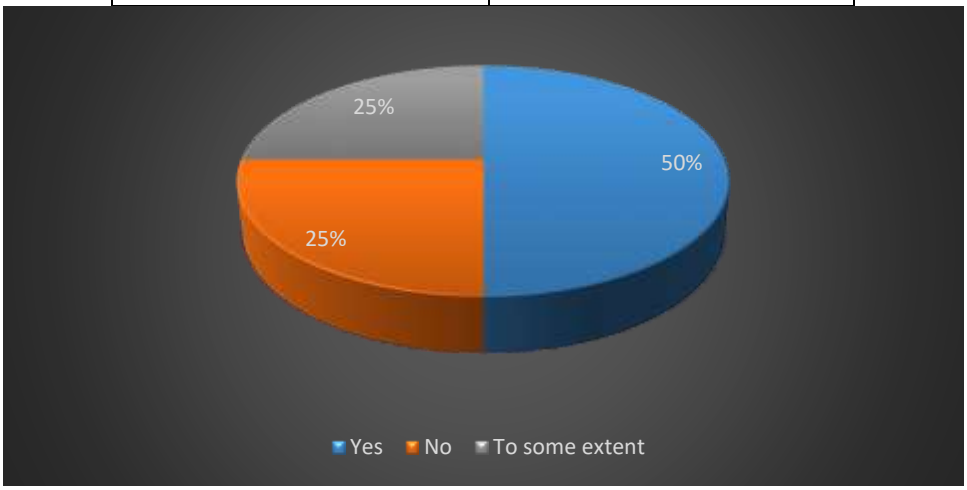



**Figure-4.26 Perception of Social Media on Nutritional Awareness**

**Findings**

The above table presents the distribution of respondents based on their perception of social media in increasing nutritional awareness. Out of 100 respondents, 50 students (50%) reported that social media helps in increasing nutritional awareness. This indicates that nearly half of the participants view social media as a useful platform for gaining information about nutrition and nutritional deficiencies. Meanwhile, 25 respondents (25%) stated that social media does not contribute to increasing their nutritional awareness. This suggests that a considerable proportion of students may either distrust the information available on social media or may not actively use it for educational purposes. Another 25 respondents (25%) reported that social media increases nutritional awareness only to some extent. This reflects a balanced perception, where students acknowledge its potential benefits but may also recognize limitations such as misinformation or lack of credibility. Overall, the findings show that while social media is perceived positively by a large segment of respondents, nearly half of the participants either doubt its effectiveness or perceive it as only partially helpful. This highlights the need for promoting accurate and evidence-based nutrition information on digital platforms.

## 5. Distribution of Respondents Based on need for proper nutrition and body image guidance

Adolescence and early adulthood are sensitive stages of life characterized by rapid physical growth, emotional changes, and increased concern about appearance. During this period, individuals are highly influenced by peer groups, societal expectations, and media portrayals of ideal body standards. Inadequate knowledge about balanced nutrition combined with body image dissatisfaction may lead to unhealthy eating behaviours such as meal skipping, restrictive dieting, overeating, or dependence on junk food. In the context of the present study, which explores stress, eating behaviour, social media influence, and nutritional awareness among students, assessing the perceived need for proper nutrition and body image guidance is essential. Students who lack accurate information and professional guidance may adopt harmful dietary practices in an attempt to achieve a desired body shape. This may increase the risk of nutritional deficiencies, poor mental health, and long-term health complications. Therefore, this section presents the distribution of respondents based on their perceived need for structured nutrition education and body image counselling. The findings will help determine whether students recognize the importance of professional guidance and whether there is a demand for intervention programs aimed at promoting healthy eating habits and positive body image.

**Table 27**

**Requirement for Nutrition and Body Image Guidance**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 67% |
| No | 33% |
| Total | 100% |

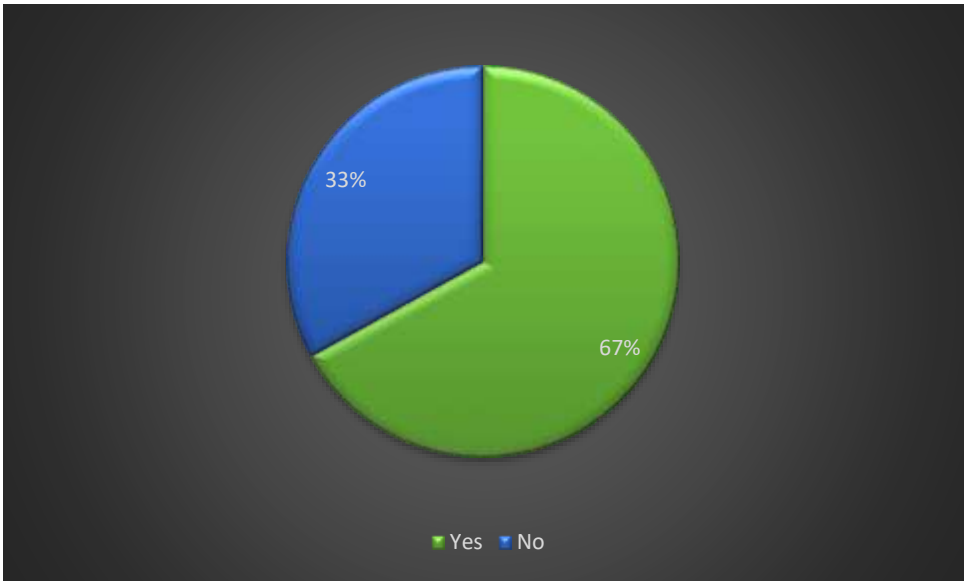



**Figure-4.27 Requirement for Nutrition and Body Image Guidance**

**Findings**

The above table shows the distribution of respondents based on their perceived need for proper nutrition and body image guidance. Out of the total 100 respondents, a majority of 67 students (67%) expressed that they need proper guidance regarding nutrition and body image. This indicates that two-thirds of the participants recognize the importance of structured education and counselling to maintain healthy eating habits and develop a positive body image. On the other hand, 33 respondents (33%) reported that they do not feel the need for such guidance. Although this represents a smaller proportion compared to those who responded "Yes," it still shows that one-third of the study population may either feel confident about their current knowledge or may not fully understand the importance of professional guidance. Overall, the findings clearly demonstrate a strong demand for nutrition education and body image support programs among the majority of respondents. This highlights the necessity of implementing targeted awareness and intervention initiatives within the study setting to promote healthy dietary practices and positive self-perception.

**F. Nutritional Knowledge and Social Media Influence**

Nutritional knowledge refers to the understanding of balanced diet, essential nutrients, dietary requirements, food safety, and healthy eating practices necessary for maintaining good health and preventing diseases. Adequate nutrition knowledge helps individuals make informed food choices, adopt healthy lifestyles, and reduce the risk of malnutrition, obesity, and other diet-related disorders. In the present era, access to nutrition information is no longer limited to textbooks or health professionals; it is widely available through digital platforms.

Social media platforms such as Instagram, YouTube, Facebook, and WhatsApp play a significant role in shaping dietary awareness and food-related behaviours. These platforms provide exposure to health trends, fitness content, diet plans, and nutrition tips shared by influencers, dietitians, and wellness communities. While

social media can enhance nutritional awareness and promote healthy habits, it may also spread misinformation, unrealistic body standards, and unverified diet practices.

Therefore, understanding the relationship between nutritional knowledge and social media influence is essential. It helps to evaluate whether social media serves as a reliable source of nutrition information and how it impacts food choices, eating behaviour, and overall health awareness among individuals.

### 1. Distribution of Respondents based on Perception of correct nutrition

This section presents the distribution of respondents according to their perception of correct nutrition. Perception of correct nutrition refers to how individuals understand and interpret the concept of a balanced diet, adequate nutrient intake, and healthy eating practices. It reflects whether respondents have accurate knowledge about essential nutrients, portion sizes, dietary diversity, and the importance of maintaining proper eating habits. Assessing respondents' perception of correct nutrition is important to identify the level of awareness and misconceptions related to healthy dietary practices. It also helps in understanding whether individuals are able to distinguish between scientifically recommended nutrition guidelines and common myths or misinformation, especially in the context of increasing exposure to health information through various sources. The distribution highlights the proportion of respondents who have adequate, moderate, or inadequate perception of correct nutrition, thereby providing insight into the overall nutritional awareness within the study population.

**Table 28**

**Respondents' Perception of Correct Nutrition**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 17 % |
| No | 31% |
| Sometimes | 52 % |
| Total | 100 % |

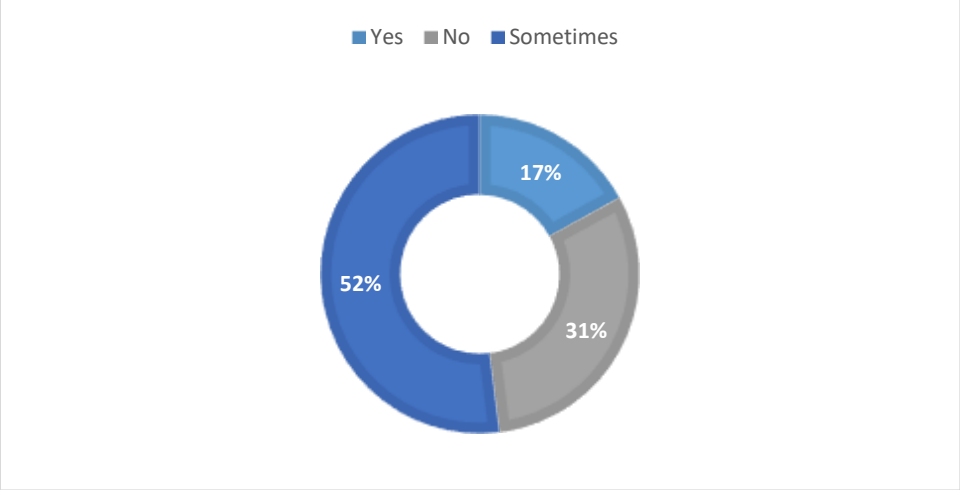



**Figure-4.28 Respondents' Perception of Correct Nutrition**

**Findings**

Out of 100 respondents, **52 (52%)** reported *Sometimes*, indicating that more than half of the participants have only a partial or occasional understanding of correct nutrition. **31 respondents (31%)** responded *No*, suggesting that nearly one-third of the respondents do not have a clear perception of correct nutrition. Meanwhile, only **17 respondents (17%)** responded *Yes*, showing that a smaller proportion of respondents believe they have a proper understanding of correct nutrition. The findings reveal that the majority of respondents do not consistently possess accurate nutritional knowledge. The high percentage in the "Sometimes" category indicates moderate awareness but also highlights the presence of confusion or uncertainty regarding balanced diet and healthy eating practices. Therefore, there is a need for improved nutrition education and awareness programs to enhance correct nutritional perception among the study population.

**2. Distribution of Respondents based on confusion caused by social media**

This section presents the distribution of respondents according to whether they experience confusion due to nutrition-related information shared on social media. With the increasing use of platforms such as Instagram, YouTube, Facebook, and WhatsApp, individuals are exposed to a wide range of diet trends, health tips, and fitness advice from various sources. While social media can improve awareness about nutrition and healthy lifestyles, it may also lead to confusion due to contradictory information, unverified claims, and the promotion of fad diets. Differences in opinions among influencers, lack of scientific evidence, and exaggerated health benefits can make it difficult for individuals to identify accurate and reliable information.

The distribution of respondents helps to determine the extent to which social media contributes to confusion regarding correct nutrition practices. It provides insight into whether respondents feel misled, uncertain, or confident about the nutrition information they encounter online.

**Table 29**

**Respondents Confused by Social Media**

| Basis of Comparison | Per cent |
|---|---|
| Yes | 65 % |
| No | 35 % |
| **Total** | **100 %** |

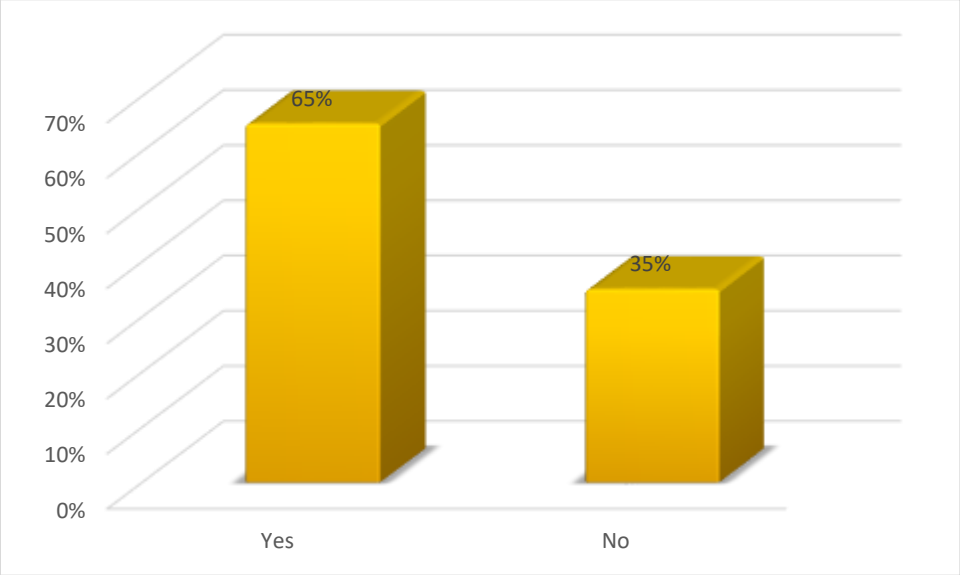



**Figure-4.29 Respondents Confused by Social Media**

**Findings**

Out of 100 respondents, **49 respondents (65.33%)** answered *Yes*, indicating that a majority experience confusion due to nutrition-related content on social media. In contrast, **26 respondents (34.66%)** answered *No*, suggesting that about one-third of the respondents do not feel confused by such information. The findings clearly indicate that social media plays a significant role in creating confusion about correct nutrition practices among the study population. The high percentage of respondents reporting confusion may be due to exposure to contradictory diet trends, unverified claims, and influencer-based advice without scientific backing. This highlights the need for promoting credible sources of nutrition information and improving digital literacy to help individuals critically evaluate health-related content shared on social media platforms.

**3. Distribution of Respondents based on influence of social media on body image**

This section presents the distribution of respondents according to the extent to which social media influences their perception of body image. Body image refers to an individual's thoughts, feelings, and attitudes toward their physical appearance. With the widespread use of platforms such as Instagram, YouTube, Facebook, and Snapchat, exposure to idealized body standards and edited images has become increasingly common. Social media often promotes specific beauty ideals, fitness trends, and comparison culture, which may positively or negatively impact individuals' self-esteem and body satisfaction. Some respondents may feel motivated to adopt healthier habits, while others may experience dissatisfaction, pressure to conform, or lowered self-confidence. The distribution of respondents highlights the proportion of individuals who feel influenced, not influenced, or influenced to some extent by social media in shaping their body image. This analysis helps to understand the psychological and behavioural impact of social media on self-perception and overall well-being.

**Table 30**

**Influence of Social Media on Body Image**

| Basis of Comparison | Per cent |
|---|---|
| Not at all | 53 % |
| A little | 33% |
| Moderately | 8 % |
| Highly | 6% |
| **Total** | **100 %** |

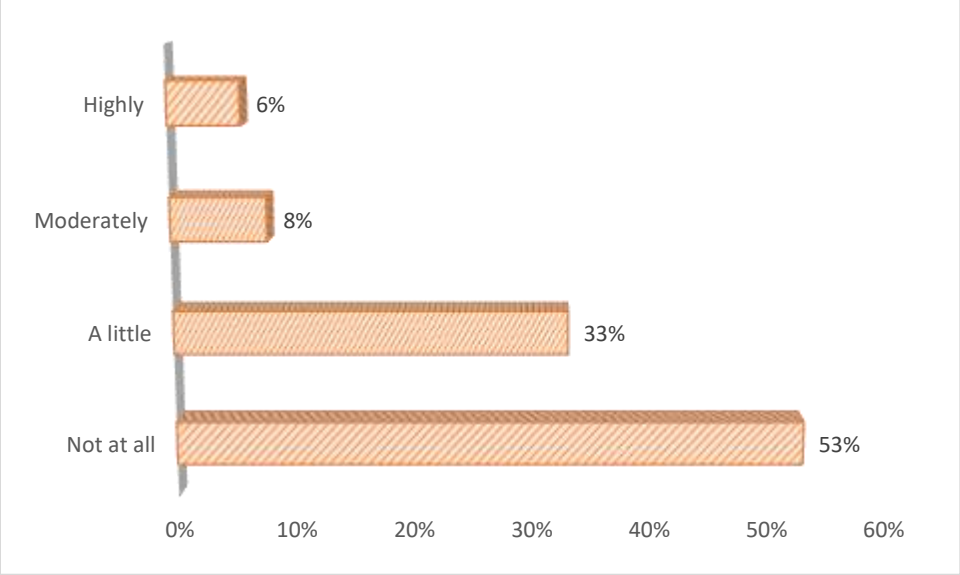



**Figure-4.30 Influence of Social Media on Body Image**

**Findings**

Out of 100 respondents, **53 respondents (53%)** reported *Not at all*, indicating that more than half of the participants feel that social media does not influence their body image. **33 respondents (33%)** reported *A little*, showing that one-third experience a slight influence. Meanwhile, **8 respondents (8%)** reported *Moderately*, and only **6 respondents (6%)** reported *Highly*, indicating that a small proportion of respondents experience a strong impact of social media on their body image. The findings suggest that although a majority claim no influence, a considerable percentage (47%) experience at least some level of impact from social media on their body image. This indicates that social media does have a psychological effect on nearly half of the study population, though for most it is mild rather than severe. The results highlight the importance of promoting positive body image awareness and responsible social media use to prevent negative self-perception.

## 4. Distribution of Respondents based on Influence of social media eating behaviour

This section presents the distribution of respondents according to the extent to which social media influences their eating behaviour. Eating behaviour refers to food choices, meal patterns, portion sizes, dieting practices, and attitudes toward food. With increased exposure to content on platforms such as Instagram, YouTube, Facebook, and WhatsApp, individuals frequently encounter diet trends, fitness challenges, "what I eat in a day" videos, and weight-loss promotions. Social media can positively influence eating behaviour by promoting healthy recipes, balanced diets, and awareness about nutrient intake. However, it may also encourage unhealthy dieting practices, meal skipping, extreme calorie restriction, or the adoption of fad diets without proper guidance. The distribution of respondents helps to assess whether social media plays a significant role in shaping food preferences and dietary habits. It provides insight into the proportion of individuals who are influenced, not influenced, or influenced to some extent in their eating behaviour due to social media exposure.

**Table 31**

**Respondents by Social Media Impact on Eating Habits**

| Basis of Comparison | Per cent |
|---|---|
| Not at all | 49 % |
| A little | 23 % |
| Moderately | 21.33 % |
| Highly | 7 % |
| **Total** | **100 %** |

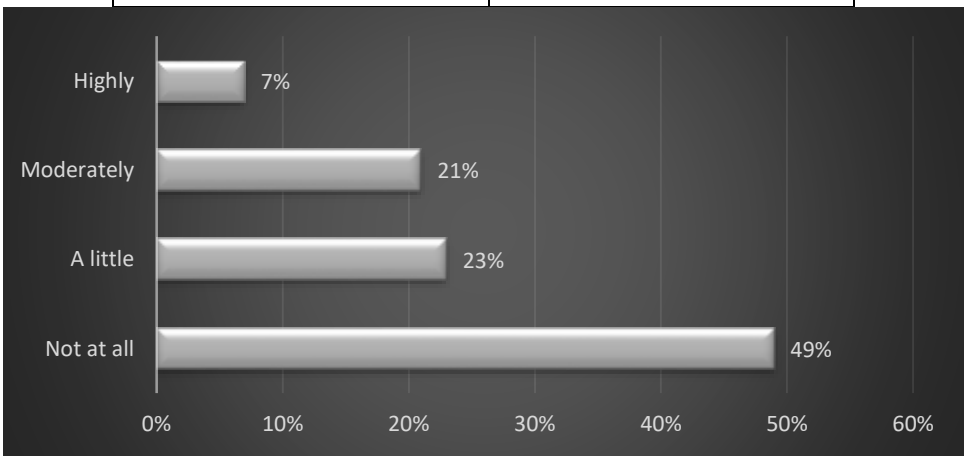



**Figure-4.31 Respondents by Social Media Impact on Eating Habits**

**Findings**

Out of 100 respondents, **49 respondents (49%)** reported *Not at all*, indicating that nearly half of the participants feel that social media does not influence their eating behaviour. **23 respondents (23%)** reported *A little*, while **21 respondents (21%)** reported *Moderately*, showing that a considerable proportion experience

some level of influence. Additionally, **7 respondents (7%)** reported *Highly*, indicating a small group that is strongly influenced by social media in their dietary habits. The findings reveal that although the largest proportion reports no influence, more than half of the respondents (50%) experience at least some degree of impact from social media on their eating behaviour. This suggests that social media plays a noticeable role in shaping food choices and dietary patterns for many individuals. Therefore, it highlights the importance of promoting accurate nutrition information and encouraging critical evaluation of diet-related content shared online.

### 5. Distribution of Respondents based on Trust in nutrition/ diet advice from social media influencers

This section presents the distribution of respondents according to their level of trust in nutrition and diet advice provided by social media influencers. Social media influencers are individuals who create and share content related to health, fitness, and lifestyle on platforms such as Instagram, YouTube, Facebook, and Snapchat. Many influencers share meal plans, weight-loss tips, supplement recommendations, and diet trends. While some may have professional qualifications in nutrition or dietetics, others may provide advice based on personal experience without scientific evidence. This variation can influence the credibility and reliability of the information shared. The distribution of respondents helps to understand whether individuals fully trust, partially trust, or do not trust nutrition advice from social media influencers. It provides insight into the degree of confidence placed in online diet information and highlights the need for critical evaluation of health-related content shared on digital platforms.

**Table 32**

**Respondents' Trust in Social Media Diet Advice**

| Basis of Comparison | Per cent |
|---|---|
| Strongly Disagree | 17% |
| Disagree | 25 % |
| Neutral | 32 % |
| Agree | 25 % |
| Strongly agree | 3 % |
| **Total** | **100 %** |

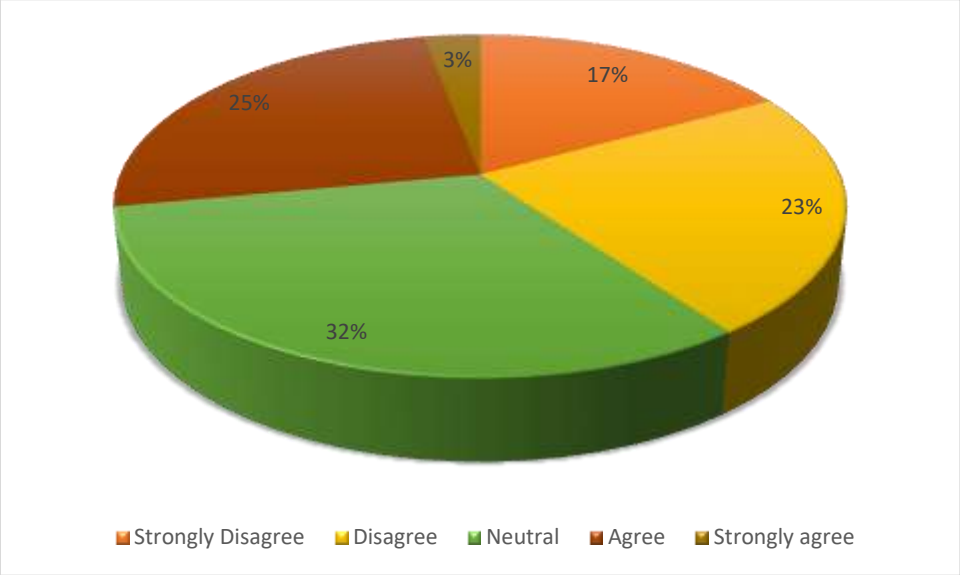



**Figure 4.32 Respondents' Trust in Social Media Diet Advice**

**Findings**

Out of 100 respondents, **13 respondents (17.33%)** *Strongly Disagree* and **17 respondents (22.66%)** *Disagree*, indicating that **40%** of the respondents do not trust nutrition advice from social media influencers. **24 respondents (32%)** remained *Neutral*, suggesting uncertainty or selective trust depending on the influencer or content. On the other hand, **19 respondents (25.33%)** *Agree* and only **2 respondents (2.66%)** *Strongly Agree*, showing that a smaller proportion (28%) express trust in such advice. The findings indicate that the majority of respondents either do not trust or are uncertain about nutrition and diet advice shared by social media influencers. This reflects a cautious attitude toward online health information. The comparatively low percentage of strong agreement highlights limited complete confidence in influencer-based diet advice. Therefore, the results emphasize the importance of promoting evidence-based nutrition guidance and encouraging individuals to verify information from qualified health professionals before adopting dietary practices

**41. Distribution of Respondents based on Food frequency**

**Table 33**

**Food Frequency Distribution**

| Food frequency | Daily | | Twice in a week | | Weekly | | Monthly | | Rarely | | Never | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % |
| Cereals | 67 | 67% | 16 | 16% | 17 | 17 % | - | - | - | - | - | - |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pulses | 60 | 60% | 20 | 20% | 20 | 20% | - | - | - | - | - | - |
| Milk and milk product | 81 | 81% | 04 | 4% | 04 | 4% | 03 | 3% | 05 | 5% | 03 | 3% |
| Egg | 32 | 32% | 35 | 35% | 21 | 21% | 03 | 3% | 05 | 5% | 04 | 4% |
| Meat and fish | 43 | 43% | 19 | 19% | 33 | 33% | 01 | 1% | - | - | 04 | 4% |
| Green leafy vegetables | 36 | 36% | 19 | 19% | 16 | 16% | 15 | 15 % | 11 | 11% | 03 | 3% |
| Other vegetables | 64 | 64% | 17 | 17% | 12 | 12% | 04 | 4% | - | - | 03 | 3% |
| Root and tubers | 09 | 9% | 24 | 24% | 19 | 19% | 19 | 19 % | 17 | 17% | 12 | 12 % |
| Fruits | 35 | 35% | 32 | 32% | 15 | 15% | 07 | 7% | 10 | 10% | 01 | 1% |
| Sugar | 63 | 63% | 08 | 8% | 05 | 5% | 08 | 8% | 13 | 13% | 03 | 3% |
| Fat and oil | 100 | 100 % | - | - | - | - | - | - | - | - | - | - |

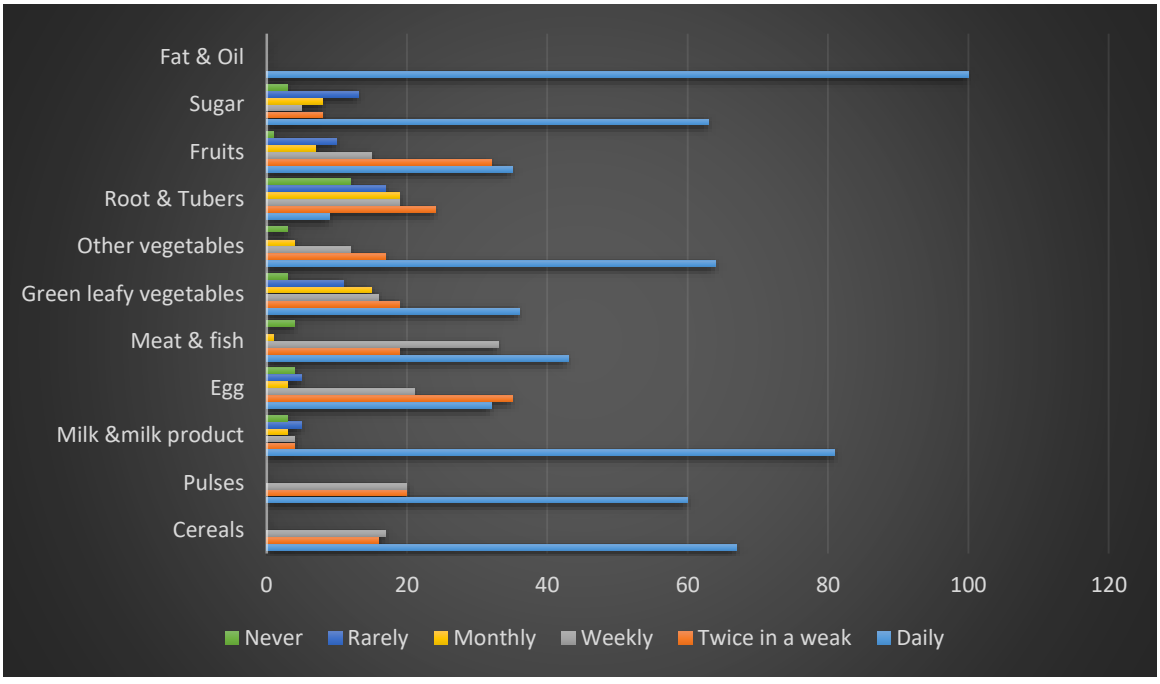



**Figure 4.33 Food Frequency Distribution**

## Findings

The findings of the food frequency data (n = 100) reveal that cereals (67%), pulses (61%), milk and milk products (79%), other vegetables (64%), sugar (63%), and fat and oil (100%) are consumed daily by the

majority of respondents, indicating that these form the staple components of their diet. Egg consumption is moderate, with 32% consuming daily and 35% twice a week, while 43% consume meat and fish daily and 33% weekly. In contrast, the daily intake of green leafy vegetables (36%) and fruits (35%) is comparatively lower, with many respondents consuming them only twice a week or weekly. Root and tubers are least consumed daily (9%), with most respondents reporting occasional intake. Overall, while staple foods and energy-dense items are regularly consumed, the relatively lower daily intake of fruits and green leafy vegetables suggests a need to improve dietary diversity and micronutrient-rich food consumption.

## STATISTICAL TEST ANALYSIS

**CHI-SQUARE TEST** : The Chi-Square Test is a statistical technique used to determine whether there is a significant association between two categorical variables. It works by comparing the observed frequencies obtained from the collected data with the expected frequencies that would occur if there were no relationship between the variables. If the difference between these frequencies is large enough, it indicates that the variables are not independent and that a significant association exists between them.

## ADVANTAGES

### 1. Easy to understand and apply

The chi-square test is considered one of the simplest statistical methods used in research. It involves comparing observed and expected frequencies, which makes the calculation and interpretation relatively straightforward. Because of its simplicity, it is widely used by researchers in social sciences, nutrition studies, and public health research.

### 2. Suitable for categorical variables

The chi-square test is specifically designed to analyse categorical or qualitative data. Variables that are divided into categories such as gender (male/female), responses (yes/no), or groups (low/high usage) can be easily analysed using this test. This makes it very useful in survey-based studies.

### 3. No assumption of normal distribution

Unlike many parametric statistical tests, the chi-square test does not require the data to follow a normal distribution. This makes it flexible and suitable for many real-life datasets where the data may not follow a specific distribution pattern.

### 4. Useful for testing relationships between variables

The chi-square test helps researchers determine whether two categorical variables are related or independent of each other. It is commonly used to examine associations between different factors in research studies.

**5. Applicable to large datasets**

This test works effectively when the sample size is sufficiently large. In studies involving many participants and multiple response categories, the chi-square test can provide reliable information about associations between variables.

**DISADVANTAGES**

**1. Does not measure strength of association**

Although the chi-square test can indicate whether an association exists between variables, it does not show how strong the relationship is. Additional statistical measures are needed to determine the strength of association.

**2. Cannot determine cause-and-effect relationship**

The chi-square test only identifies whether two variables are associated with each other. It does not prove that one variable directly causes changes in another variable.

**3. Requires adequate sample size**

For the chi-square test to produce accurate results, each category should contain a sufficient number of observations. If the sample size is too small, the results may become unreliable.

**4. Not suitable for continuous data**

The chi-square test is mainly used for categorical variables and cannot directly analyse numerical or continuous data such as age, weight, or time unless these values are converted into categories.

**5. Sensitive to small expected frequencies**

When the expected frequency in one or more cells of the contingency table is very small, the results of the chi-square test may not be valid. In such situations, alternative tests may be recommended.

6**. Limited information about relationships**

While the test can confirm the presence of an association, it does not provide detailed information about the nature or direction of the relationship between variables.

**Reason for Applying Chi-Square Test in the Study**

The Chi-square test is applied in this study to examine whether there is a significant association between categorical variables related to social media usage and eating behaviour among teenagers. Since many of the variables in the research questionnaire are grouped into categories such as high or low social media usage, meal skipping (yes or no), and other eating behaviour patterns, the chi-square test is appropriate for analysing the relationship between these variables. It helps determine whether differences observed in the data occur by chance or whether they represent a statistically significant association. Therefore, the chi-square test is useful for identifying whether social media usage is significantly associated with changes in eating behaviour among the study participants.

**Chi-square test**

Relationship between Social Media usage and Body image influence among teenagers

**Step 1: Objective**

To examine whether there is a significant relationship between social media usage and body image influence among teenagers.

**Step 2 : Hypothesis**

**H0 (Null Hypothesis) :**

There is no significant relationship between social media usage and body image influence.

**H1 (Alternative Hypothesis)**

There is a significant relationship between social media usage and body image influence.

**Step 3 : Observed Frequency Table**

| **Social media usage** | **Influenced** | **Not influenced** | **Total** |
|---|---|---|---|
| Less than 1 hour | 10 | 23 | 33 |
| 1-2 hours | 22 | 15 | 37 |
| 2-4 hours | 5 | 2 | 7 |
| More than 4 hours | 18 | 5 | 23 |
| **total** | **55** | **45** | **100** |

**Calculation of expected frequency**

Formula :

Row total * Column total

E = ——————————

Grand total

**Similarly calculating for all cells;**

| Social media usage | Influenced | Not influenced |
|---|---|---|
| Less than 1 hour | 18.15 | 14.85 |
| 1-2 hours | 20.35 | 16.85 |
| 2-4 hours | 3.85 | 3.15 |
| More than 4 hours | 12.65 | 10.35 |

**Step 4 : Chi-square calculation**

(O-E) 2

$X^2 = \Sigma$ ————

E

| O | E | O-E | (O-E)2 | (O-E)2/2 |
|---|---|---|---|---|
| 10 | 18.15 | -8.15 | 66.42 | 3.66 |
| 23 | 14.85 | 8.15 | 66.42 | 4.47 |
| 22 | 20.35 | 1.65 | 2.72 | 0.13 |
| 15 | 16.65 | -1.65 | 2.72 | 0.16 |
| 5 | 3.85 | 1.15 | 1.32 | 0.34 |
| 2 | 3.15 | -1.15 | 1.32 | 0.42 |
| 18 | 12.65 | 5.35 | 28.62 | 2.26 |
| 5 | 10.35 | -5.35 | 28.62 | 2.76 |
| **total** | | | | **14.2** |

**$x^2$ = 14.20**

**Step 5 : Degree of freedom**

df = (r-1)(c-1)

df = (4-1)(2-1)

df = 3

**Step 6 : Table value**

At 5% level of significance

x2 = table value = 7.815

**Step 7 : Decision**

Since the calculated value (14.20) is greater than the table value (7.815), the null hypothesis (H0) is rejected and the alternative hypothesis (H1) is accepted.

**Conclusion**

It is concluded that there is a significant relationship between social media usage and body image influence among teenagers.

**CORRELATION** : The Correlation is a statistical method used to measure the strength and direction of the relationship between two variables. It indicates how changes in one variable are related to changes in another variable. The relationship is expressed using a correlation coefficient (r), which ranges from −1 to +1, where positive values indicate a direct relationship, negative values indicate an inverse relationship, and a value close to zero indicates no relationship between the variables.

**ADVANTAGES**

1 **.Measures strength of relationship between variables**

Correlation analysis provides a numerical value called the correlation coefficient (r), which indicates how strongly two variables are related. The closer the value is to +1 or −1, the stronger the relationship between the variables.

2**. Indicates direction of relationship**

Correlation analysis not only shows the strength of a relationship but also its direction. A positive correlation means that both variables increase together, while a negative correlation means that when one variable increases, the other decreases.

3. **Helps identify patterns and trends**

By analysing correlation, researchers can observe patterns and trends in data. This can help in understanding how certain behaviours or factors are related to each other.

**4. Easy to compute using statistical software**

Correlation analysis can be easily performed using statistical software such as IBM SPSS Statistics, Microsoft Excel, or other data analysis tools. This makes it convenient for researchers to analyse large datasets.

**5. Useful for predictive analysis**

Correlation analysis can help researchers predict how one variable may change when another variable changes. Although it does not prove causation, it can provide useful insights into potential relationships.

**DISADVANTAGES**

**1. Does not prove cause and effect**

One of the main limitations of correlation analysis is that it cannot establish a causal relationship between variables. Even if two variables show a strong correlation, it does not mean that one variable directly causes the other.

**2. Influenced by outliers**

Extreme values or unusual observations in the dataset can significantly affect the correlation coefficient. This may lead to misleading conclusions if outliers are not properly identified and managed.

**3. Only measures linear relationships**

Correlation analysis mainly detects linear relationships between variables. If the relationship between variables is nonlinear or complex, correlation analysis may fail to accurately represent it.

**4. Risk of misinterpretation**

Researchers may sometimes incorrectly assume that a strong correlation indicates causation. Proper interpretation and understanding of the results are necessary to avoid such errors.

**5. Does not consider external factors**

Correlation analysis only measures the relationship between two variables and does not account for other variables that might influence the relationship.

**Reason for Applying Correlation in the Study**

Correlation analysis is applied in this study to measure the strength and direction of the relationship between social media usage and body image perception among teenagers. The variables such as time spent on social media and body image perception scores are numerical or scale-based, making correlation analysis suitable for examining how these variables are related. By calculating the correlation coefficient, the study can determine whether increased social media usage is associated with higher levels of body image dissatisfaction or other related perceptions. Thus, correlation analysis helps in understanding the extent to which social media exposure influences body image perception among teenagers.

**Correlation Analysis**

Relationship between Social media usage and Change in Eating pattern among teenagers.

**Step 1 : Objective**

To determine whether there is a relationship between social media usage and change in eating patterns among teenagers.

**Step 2 : Method used**

The Karl Pearson's correlation coefficient method is used to measure the relationship between the two variables.

**Step 3 : Formula**

$$r = \frac{N\sum XY - (\sum X)(\sum Y)}{[N\sum X2 - (\sum X)2][N\sum Y2 - (\sum Y)2]N\sum XY - (\sum X)(\sum Y)}$$

**Where:**

- **r** = Karl Pearson's correlation coefficient
- **N** = Number of observations
- **ΣX** = Sum of X values
- **ΣY** = Sum of Y values
- **ΣXY** = Sum of the product of X and Y
- **$\Sigma X^2$** = Sum of squares of X values
- **$\Sigma Y^2$** = Sum of squares of Y values

**Step 4 : Assigned Scores**

**Social Media usage (X)**

| Category | Score |
|---|---|
| Less than 1 hour | 1 |
| 1-2 hours | 2 |
| 2-4 hours | 3 |
| More than 4hours | 4 |

**Eating Pattern change (Y)**

| Response | Score |
|---|---|
| No change | 1 |

| | |
|---|---|
| Slight change | 2 |
| Moderate change | 3 |
| Major change | 4 |

**Step 5 : Correlation Table**

| X | Y | X2 | Y2 | XY |
|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 4 | 4 | 4 |
| 3 | 3 | 9 | 9 | 9 |
| 4 | 4 | 16 | 9 | 12 |

Therefore, ∑X = 10 , ∑Y = 9 , ∑X2 = 30 , ∑Y2 = 23 , ∑XY = 26

**Step 6 : Calculation**

**r** = (4(26) - (10)(9))/(√([4(30) - (10) ^ 2][4(23) - (9) ^ 2]))

**r** = (104 - 90)/(√([120 - 100][92 - 81]))

**r** = 14/(√((20)(11)))

**r** = 14/(√t(220))

**r** = 14/14.83

**r** = 0.94

**Step 7 : Result**

r = 0.94

This indicates a very strong positive correlation.

**Interpretation**

The result shows that's increased social media usage is strongly associated with changes in eating patterns among teenagers. Teenagers who spend more time on social media are more likely to experience changes in their eating habits.

# CHAPTRE – V

# SUMMARY AND CONCLUSION

## Summary

Adolescence is a critical stage of growth and development characterized by rapid physical, psychological, and social changes. During this stage, individuals develop habits and attitudes that often continue into adulthood. Nutrition plays an essential role during adolescence because the body requires adequate nutrients to support growth, hormonal development, and cognitive functioning. However, modern lifestyle changes, including the widespread use of digital technology and social media platforms, have significantly influenced the behaviour, attitudes, and lifestyle choices of teenagers.

In recent years, social media has become one of the most powerful influences in adolescents' lives. Teenagers frequently use platforms such as Instagram, Facebook, TikTok, Snapchat, and YouTube to communicate, share information, and express themselves. While these platforms provide opportunities for learning and social interaction, they also expose adolescents to unrealistic beauty standards, diet trends, and appearance-focused content. Such exposure may shape their perceptions of body image and influence their eating behaviours.

The present study was undertaken to examine the influence of social media on body image perception, eating behaviours, and nutritional health among teenagers aged 13–19 years. The study focused on understanding how social media usage patterns affect adolescents' satisfaction with their body image and how these perceptions influence their dietary habits and nutritional status. Adolescents are particularly vulnerable to media influence because they are in a developmental stage where self-esteem and identity formation are highly sensitive to external feedback and societal expectations.

The main objectives of the study were to analyze the frequency and duration of social media usage among teenagers, to understand their perception of body image, to assess their eating behaviours, and to identify the relationship between body image perception and eating habits. The study also aimed to evaluate adolescents' awareness of nutritional deficiencies and to suggest appropriate strategies for improving healthy eating habits and body image perception.

A cross-sectional research design was adopted for the study. The research was conducted among a selected group of adolescents within the defined age group. The study population consisted of teenagers who actively use social media platforms. A structured questionnaire was developed as the primary tool for data collection. The questionnaire included multiple sections designed to gather information on demographic details, social media usage patterns, body image perception, eating behaviours, awareness of nutritional deficiencies, and dietary intake.

The social media usage section assessed the type of platforms used by participants, the average time spent on social media per day, and the types of content they commonly engage with. This section helped in identifying the extent of exposure to appearance-related content and diet trends promoted online.

The body image perception section aimed to understand how adolescents perceive their physical appearance. Questions were designed to measure satisfaction or dissatisfaction with body shape, weight, and overall appearance. A Likert scale format was used to evaluate the intensity of participants' attitudes toward their body image. This section provided insight into how social media exposure may contribute to body dissatisfaction among teenagers.

The eating behaviour assessment section examined the dietary habits and food choices of the participants. It included questions about meal regularity, breakfast consumption, snacking habits, consumption of fast foods, intake of fruits and vegetables, emotional eating patterns, and the influence of social media on dieting practices. These questions helped to determine whether social media exposure leads to unhealthy dietary behaviours among adolescents.

Another important component of the questionnaire focused on the awareness of nutritional deficiencies. Participants were asked about their knowledge of common nutrient deficiencies such as iron deficiency, calcium deficiency, vitamin D deficiency, and protein deficiency. The section also explored their sources of nutrition information and their level of trust in social media compared to healthcare professionals.

To assess actual dietary intake, two dietary assessment methods were included in the study. The Food Frequency Questionnaire (FFQ) was used to evaluate the habitual consumption of different food groups, including cereals, pulses, dairy products, fruits, vegetables, meats, fats, and processed foods. In addition, the 24-hour dietary recall method was used to obtain detailed information about all foods and beverages consumed by participants during the previous day. This method allowed for a more accurate assessment of dietary intake and portion sizes.

The questionnaire was administered through direct interaction with the participants in the study setting. Participants were given clear instructions on how to complete the questionnaire, and sufficient time was provided for them to respond. Confidentiality and anonymity were maintained throughout the data collection process to ensure honest and unbiased responses.

Before conducting the final data collection, the questionnaire was pre-tested among a small group of adolescents who were not included in the main study. The pre-testing process helped identify any ambiguities or difficulties in the questions. Necessary modifications were made to improve the clarity and reliability of the questionnaire.

The collected data were coded and organized systematically for analysis. Statistical analysis was performed using appropriate techniques. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize the data. Correlation analysis was used to determine the relationship between body image perception and eating behaviours among adolescents.

The findings of the study revealed that social media usage is very common among teenagers, with many participants spending several hours each day on various platforms. A significant proportion of adolescents reported regularly viewing content related to fashion, fitness, dieting, and body transformation. Continuous exposure to such content often led teenagers to compare themselves with unrealistic body ideals presented online.

The study found that many adolescents expressed some level of dissatisfaction with their body image. This dissatisfaction was more commonly reported among female participants, although male adolescents were also influenced by muscularity ideals promoted on social media. Body dissatisfaction was often associated with feelings of low self-esteem and increased concern about physical appearance.

The study also highlighted several unhealthy eating behaviours among adolescents. A considerable number of participants reported skipping meals, particularly breakfast. Frequent snacking on fast foods and processed snacks was also observed. Many teenagers consumed inadequate amounts of fruits, vegetables, and other nutrient-rich foods. These dietary patterns indicate a potential risk of nutritional imbalance.

In addition, some adolescents reported following dieting trends or food restrictions influenced by social media influencers or celebrities. These practices sometimes involved eliminating certain food groups or drastically reducing calorie intake in order to achieve a desired body shape. Such behaviours may lead to inadequate intake of essential nutrients required for healthy growth and development.

The study also revealed gaps in adolescents' knowledge about nutritional deficiencies. While some participants were aware of common deficiencies such as iron deficiency anemia, many lacked a comprehensive understanding of the symptoms, causes, and prevention of nutrient deficiencies. Social media was often cited as a source of nutrition information, although the reliability of such information varied widely.

Overall, the findings suggest that social media plays a complex role in shaping adolescents' attitudes toward body image and food choices. While social media can be used as a platform for promoting health education, it can also contribute to unrealistic expectations and unhealthy lifestyle behaviours if not used responsibly.

The results emphasize the importance of promoting nutrition education and media literacy among adolescents. By improving their understanding of balanced diets, healthy body image, and critical evaluation of online content, teenagers can develop healthier attitudes toward food and physical appearance.

**Conclusion**The present study highlights the growing influence of social media on adolescents' body image perception and eating behaviours. As digital technology becomes increasingly integrated into daily life, teenagers are spending more time engaging with social media platforms that often promote unrealistic beauty standards and diet trends. These influences can shape adolescents' perceptions of their bodies and encourage unhealthy dietary practices.

The findings of the study demonstrate that many teenagers experience dissatisfaction with their body image due to comparisons with idealized images presented on social media. Such dissatisfaction can negatively affect self-esteem and emotional well-being. Adolescents who feel unhappy with their physical appearance may adopt unhealthy behaviours in an attempt to achieve socially accepted body standards.

Unhealthy eating behaviours identified in the study include meal skipping, irregular eating patterns, excessive consumption of fast foods, and restrictive dieting practices. These behaviours may reduce the intake of essential nutrients required for proper growth and development. Over time, poor dietary habits can lead to nutritional deficiencies, impaired physical health, and increased risk of chronic diseases.

The study also reveals that adolescents often rely on social media as a source of nutrition information. However, not all information shared online is scientifically accurate or reliable. Misinformation about dieting and weight management can mislead teenagers and contribute to unhealthy lifestyle choices. Therefore, it is essential to equip adolescents with the knowledge and skills needed to evaluate online content critically.

Another important observation from the study is the role of psychosocial factors such as self-esteem, peer influence, and gender differences in shaping body image perception and eating behaviours. Female adolescents were generally more likely to report dissatisfaction with their body weight and shape, while male adolescents were influenced by muscularity ideals. These gender-specific influences highlight the need for targeted interventions that address the unique challenges faced by different groups of adolescents.

The findings emphasize the importance of implementing nutrition education programs that promote balanced diets and healthy lifestyle practices among teenagers. Schools can play a crucial role in providing nutrition education and encouraging positive body image through health education programs. Integrating media literacy into school curricula can help students develop critical thinking skills when interpreting social media content.

Parents and caregivers also play an important role in guiding adolescents toward healthy behaviours. Open communication about body image, self-esteem, and nutrition can help teenagers develop a more realistic and positive perception of their bodies. Encouraging family meals and healthy food choices can further support the development of balanced dietary habits.

Healthcare professionals, including nutritionists and public health experts, should also contribute to awareness campaigns aimed at promoting adolescent nutrition and well-being. Providing reliable nutrition information

through credible online platforms can counteract the spread of misleading diet trends on social media.In addition, social media platforms themselves can be used as tools for promoting positive health messages. Educational campaigns that highlight body positivity, balanced nutrition, and healthy lifestyle practices can reach a large audience of young people and help reshape the narrative around body image.

In conclusion, while social media has the potential to influence adolescents negatively, it can also be used as a powerful platform for promoting health education and positive behavioural change. By improving adolescents' awareness of nutrition, encouraging critical evaluation of media content, and fostering supportive social environments, it is possible to mitigate the negative effects of social media on body image and eating behaviours.

Ensuring that adolescents develop healthy relationships with food and their bodies is essential for their long-term health and well-being. Future research should continue exploring the complex interactions between social media exposure, psychological factors, and nutritional health among adolescents in order to design effective interventions and policies that support the next generation.

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# APPENDIX

## QUESTIONNAIRE

The pre- evaluation and post - evaluation questionnaire used for the survey entitled **"A STUDY ON THE EFFECT OF SOCIAL MEDIA INFLUENCES ON BODY IMAGE PERCEPTION, EATING PERFORMANCE, AND AWARENESS OF NUTRITIONAL DEFICIENCIES AMONG ADOLESCENT GIRLS."** includes the following.

## ASSESSMENT SHEET

1. Name:

2. Age:

3. Gender:

☐ Male ☐ Female ☐ Other

4. Class/Grade:

5. School/College Name:

6. Do you use a smartphone?

☐ Yes ☐ No

7. Daily screen time (approx.):

☐ <1 hour ☐ 1–2 hours ☐ 2–4 hours ☐ >4 hours

8. Which social media platforms do you use?

☐ Instagram ☐ Facebook ☐ Snapchat ☐ YouTube ☐ Others: _____

9. Daily time spent on social media:

☐ <1 hour ☐ 1–2 hours ☐ 2–4 hours ☐ >4 hours

10. Purpose of using social media (tick multiple):

☐ Entertainment ☐ Education ☐ Fitness/Health Content ☐ Fashion/Beauty ☐ Communication with friends ☐ Other: _____

11. Do you follow influencers or celebrities?

☐ Yes ☐ No

12. How often do you compare your appearance with people on social media?

☐ Never ☐ Sometimes ☐ Often ☐ Always

13. How often do you follow or view content about diets, fitness, body shape, or weight loss on social media?

☐ Never ☐ Sometimes ☐ Often ☐ Always

14. Are you satisfied with your body shape and appearance?

☐ Yes ☐ No ☐ Sometimes

15. Does seeing social media posts make you feel pressured to look a certain way?

☐ Yes ☐ No ☐ Sometimes

16. Has social media influenced you to try dieting or fitness changes?

☐ Yes ☐ No

17. How often do you feel negative about your looks after using social media?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often

18. Do you edit or filter your photos before posting?

☐ Yes ☐ No

19. How regular are your daily meals?

☐ Very regular ☐ Sometimes irregular ☐ Mostly irregular

20 .I regularly skip meals (breakfast/lunch/dinner).

☐ Never ☐ Sometimes ☐ Often ☐ Always

21. I follow diets I learn about on social media.

☐ Never ☐ Sometimes ☐ Often ☐ Always

22. I eat fruits and vegetables every day.

☐ Rarely ☐ 1–2 times per week ☐ 3–4 times per week ☐ Almost daily

23. Do you skip meals because of body image concerns?

☐ Yes ☐ No ☐ Sometimes

24. Do you follow any diet trends seen on social media? (e.g., keto, fasting, detox)

☐ Yes ☐ No

25. How often do you consume junk food?

☐ Rarely ☐ 1–2 times per week ☐ 3–4 times per week ☐ Almost daily

26. Do you binge eat when stressed or influenced by emotions?

☐ Yes ☐ No ☐ Sometimes

27. Has social media inspired you to eat healthier?

☐ Yes ☐ No ☐ Sometimes

28. Are you aware of common nutritional deficiencies in teenagers?

☐ Yes ☐ No ☐ Not sure

29. Which deficiencies do you know about?

☐ Iron ☐ Calcium ☐ Vitamin D ☐ Protein ☐ Iodine ☐ Others: _____

30. Where did you learn about nutritional deficiencies?

☐ Social media ☐ School/Teachers ☐ Parents ☐ Doctors ☐ Friends ☐ Others: _____

31. Do you think social media provides correct nutrition information?

☐ Yes ☐ No ☐ Sometimes

32. Has social media ever confused you about diet or nutrition?

☐ Yes ☐ No

33. Do you think social media influences your body image?

☐ Not at all ☐ A little ☐ Moderately ☐ Highly

34. Do you think social media influences your eating behaviors?

☐ Not at all ☐ A little ☐ Moderately ☐ Highly

35. Do you think social media helps increase awareness about nutrition?

☐ Yes ☐ No ☐ To some extent

36. Do you feel the need for proper guidance on nutrition and body image?

☐ Yes ☐ No

37. I trust nutrition/diet advice I see from influencers on social media.

☐ Strongly disagree ☐Disagree ☐Neutral ☐Agree ☐Strongly agree

38. I trust advice from doctors or health professionals more than social media. (reverse for influencer trust)

☐ Strongly disagree ☐Disagree ☐Neutral ☐Agree ☐Strongly agree

39. I am likely to try a diet recommended by a social media influencer.

☐ Strongly disagree ☐Disagree ☐Neutral ☐Agree ☐Strongly agree

40. I check more than one source before following nutrition advice I see online.

☐ Strongly disagree ☐Disagree ☐Neutral ☐Agree ☐Strongly agree

**41. FOOD FREQUENCY:**

| **Food group** | **Daily** | **Twice week** | **Weekly** | **Monthly** | **Rarely** | **Never** |
|---|---|---|---|---|---|---|
| cereals | | | | | | |
| Pulses | | | | | | |
| Milk and milk product | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Egg | | | | | | |
| Meat and fish | | | | | | |
| Green leafy vegetables | | | | | | |
| Other vegetables | | | | | | |
| Root and tubers | | | | | | |
| Fruits | | | | | | |
| Sugar | | | | | | |
| Fat and oil | | | | | | |

| **Meal time** | **Menu** | **Quantity** |
|---|---|---|
| **Early morning** | | |
| **Breakfast** | | |
| **Mid morning** | | |
| **Lunch** | | |
| **Evening** | | |
| **Dinner** | | |
| **Bed time** | | |