**Research Questions:**

This study aimed to provide valid answers for the following questions:

1. What are the prevalence and levels of overweight and obesity in Omani adolescent girls?
2. What are the dietary habits of Omani female adolescent girls?
3. What are the levels of physical activity and sedentary behaviours among Omani female adolescent girls?
4. What is the relationship between an adolescents’ lifestyle and their body weight?
5. Are there any differences between the lifestyles of obese or overweight Omani adolescent girls and those of normal weight?
6. What are the subjective perceptions of Omani adolescent girls regarding their dietary habits and exercise?

**2.13 The Aim and Objectives of the Study**

**2.13.1 Main aim of the study**

The aim of this study is to assess the lifestyle characteristics (physical activity level, sedentary behaviours and dietary habits) and the reasons for such lifestyle among adolescent girls aged 15–18 years in Ibri, Oman.

**2.13.2 Objectives:**

* To assess the BMI of adolescent girls by measuring their weight and height using the WHO z-score chart for girls aged 5–19 years.
* To assess the level of physical activity of the participants by:
  + Measuring the number of footsteps and energy expanded using a pedometer,
  + Recording the types of physical activities and frequency of practicing such activities using ATLS questionnaire.
* To assess dietary habits by:
  + Completion of an online questionnaire,
  + Completion of un-weighed 7- day diet diary to record the type and of food eaten, how often and the portion size.
* To assess sedentary behaviour by recording the time spent sitting or sleeping and screen-time using ATLS questionnaire.
* To compare the daily intake of calories, carbohydrate, protein, and fats by girls aged 15­–18 years with the Omani Guide of Healthy Eating.
* To estimate the total energy intake, BMR and TEE of the participants and identify the differences between the BMI categories.
* To examine the association between normal weight, obese and overweight adolescents and, physical activities, sedentary behaviours and dietary habits, from data collected from the ATLS questionnaires, pedometers and un-weighed diet diaries and to identify the differences or similarities between normal weight, obese or overweight adolescents, and normal weight adolescents in relation to their dietary habits, physical activities and sedentary behaviours.
* To explore the rationale for choosing a lifestyle (dietary habits and patterns of exercise or sedentary behaviour) using focus group discussion.