Addressing Dietary Requirements

* Include a Variety of foods from the major food groups (O)
* Use a variety of ingredients, flavors and textures (-)
* Take proper portion sizes into account (O)
* Avoid foods that are very high in fat,sugar,calories and sodium (O)
* Address the dietary needs of different age groups (O)

Accommodating Lifestyle and Allergy Concerns

* Find out if anyone is vegetarian (X)
* Inquire about food allergies and intolerances (O)
* Special diet/ Health reasons (O)
* Religion related food restrictions (O)

(X) = Not important

(O) = Very important

(-) = Managable

My verdict:

* For Nepalese only, Allergies are less common.

Source: https://www.wikihow.com/Consider-the-Factors-when-Planning-Meals

**1. Health needs.**

All food groups must be included to ensure optimal nutrition. It is very important to include in our meals the essential nutrients, vitamins and minerals that our body needs.

**2. Economic factors.**

We need to look at our balance sheet and the price of ingredients. The budget is the main factor because you can't cook what you can't afford.

**3. Religious practices.**

Some religions or denominations have restrictions on what they are allowed to eat. Muslims cannot eat pork and Jews are forced to observe Kashrut's practices. Hindus do not eat beef because of the idea that cows are sacred.

**4. Dietary concerns.**

Some diseases such as diabetes and high blood pressure limit or limit a person's dietary intake. They are not allowed to eat fatty or even sweet foods. Another factor to consider is an allergy, which would cause adverse reactions when consuming trigger foods.

**5. Environmental factors.**

This would include cooking materials and equipment that would give you the opportunity to cook certain foods.

**6. Time**

If you have a lot of time to prepare food, you can prepare extravagant dishes, but when you have little time, you can choose easy recipes rather than relying on fast food or instant products.

**7. Ability to cook.**

The most modifiable factor. They say you can't cook if you don't know what you're doing. However, you can search for videos or follow the cookbooks to help you prepare the dish you want.

My Verdict:

* For project only, religious practice won’t matter. But if you want to release it in the app store. It shouldn’t be overlooked. You don’t want to recommend beef to Hindus in lunch.

Source: https://www.quora.com/What-factors-should-be-considered-when-planning-healthy-meals

|  |  |
| --- | --- |
| Life Stage | Change in Nutrient Needs |
| Pregnancy | **Increased requirements**: energy, protein, essential fatty acids, vitamin A, vitamin C, B-vitamins (B1, B2, B3, B5, B6, B12, folate, choline) & calcium, phosphorus,\*\* magnesium, potassium, iron, zinc, copper, chromium, selenium, iodine, manganese, molybdenum |
| Lactation | **Increased requirements**: vitamins A, C, E, all B-vitamins, sodium, magnesium\*\*  **Decreased requirements**: iron |
| Infancy Childhood | **Increased requirements**: energy, protein, essential fatty acids |
| Adolescence | **Increased requirements**: energy, protein, calcium, phosphorus, magnesium, zinc (females only) |
| Early Adulthood(ages 19-50) | **Increased requirements for males, compared with females**: vitamins C, K; B1, B2, B3, and choline; magnesium, zinc, chromium, manganese  **Increased requirements for females, compared with males**: iron |
| 51+ | **Increased requirements:** vitamin B6, vitamin D  **Decreased requirements:** energy; iron (females only) |

Source: https://nutritionguide.pcrm.org/nutritionguide/view/Nutrition\_Guide\_for\_Clinicians/1342043/all/Nutritional\_Requirements\_throughout\_the\_Life\_Cycle

Carbohydrates and Sweeteners

The amount of carbohydrates will vary in each individual’s meal plan, but current nutrition recommendations do not require that people with diabetes avoid simple sugars. The objective is to focus on total carbohydrates instead of the source of carbohydrates consumed. Eating fruits, milk, potatoes, rice, bread, and other carbo-hydrate sources in a consistent meal plan may be just as effective for blood glucose management as avoiding sucrose-containing foods. Recipes in this book use sucrose and sugar substitutes as sweeteners.

Fats

The recommended amount of fat in the diet is usually based on lipid management goals. People who are at a healthy weight and have nor-mal lipid levels can consume more liberal amounts of fat than can those who need to lose weight, lower triglycerides, or follow very low-density lipoprotein modifications. Limiting consumption of fried foods and fatty meats and dairy foods can help keep saturated fats in the diet to less than 10 percent of the daily calories.

Protein

There is insufficient evidence to support recommended protein intakes in the diet. Protein does become an important factor when nephropathy (kidney disease) complications are identified. When glomerulus filtration rate (GFR) begins to fall, protein intake should be reduced so the body can maintain kidney function as long as possible without compromising muscle strength.

Source: Fast and Simple Diabetes Menus Over 125 Recipes and Meal Plans for Diabetes Plus Complicating Factors by Betty Wedman-St. Louis

***Might be Important***

Basal Metabolic Rate

* Basal metabolic rate is the rate of energy expenditure per unit time by endothermic animals at rest

To estimate your BMR

1. **BMR** for Men = 66.47 + (13.75 \* weight [kg]) + (5.003 \* size [cm]) − (6.755 \* age [years])
2. **BMR** for Women = 655.1 + (9.563 \* weight [kg]) + (1.85 \* size [cm]) − (4.676 \* age [years])

Source: https://www.healthline.com/health/what-is-basal-metabolic-rate#estimating-bmr

Resting Metabolic Rate

* Resting metabolic rate is the total number of calories burned when your body is completely at rest. RMR supports breathing, circulating blood, organ functions, and basic neurological functions. It is proportional to lean body mass and decreases approximately 0.01 kcal/min for each 1% increase in body fatness.

To estimate your RMR

* **Men:** (10 × weight in kg) + (6.25 × height in cm) - (5 × age in years) + 5
* **Women:** (10 × weight in kg) + (6.25 × height in cm) - (5 × age in years) - 161

Source: <https://blog.nasm.org/nutrition/resting-metabolic-rate-how-to-calculate-and-improve-yours>

Energy requirement =BMR+ physical activity +TEF