

Sodium Intake Nutritional Epidemiological Tools

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Description

Cardio metabolic diseases (metabolic syndrome and diabetes mellitus 2) are linked to cardiovascular risk factors like dyslipidemia, abdominal obesity, insulin resistance, and high blood pressure or hypertension, all of which raise the risk of cardiovascular diseases (CVD), which have a high global prevalence. Diabetes and metabolic syndrome are two examples of cardio metabolic disorders. The interplay of genetic predisposition and environmental variables causes hypertension as a CVD risk factor. Blood pressure is influenced by food, particularly dietary sodium. For decades, scientists have examined the relationship between salt and blood pressure. Because sodium, or salt, plays such an important part in determining blood volume, it is directly linked to blood pressure. Modern diets are heavy in salt, and processed foods with high salt levels are becoming more popular in both developed and developing countries. Adult sodium intake should be less than 2 g/day (85 mmol/day), according to the findings of a joint WHO/FAO Expert Consultation on Diet, Nutrition, and the Prevention of Chronic Diseases. As a result, there are various national and worldwide programmes aimed at lowering salt consumption [1-3].

Food reformulation with industry involvement, consumer education, pack labelling information relating to salt or sodium, interventions in public institution contexts, and a tax system are the major implementation techniques for salt reduction. It is vital to know the amount of salt consumed as well as the primary dietary sources of salt in order to develop appropriate nutrition policies. However, because diet is a dynamic phenomenon, many approaches to estimate sodium consumption, both direct and indirect, have been developed to meet the needs and research potential. In equilibrium, the kidneys handle the majority of salt absorbed throughout the day, excreting 90-95 percent of sodium in the urine within 24 hours. As a result, 24-hour urine samples are still used to estimate population and individual salt intake, and it is commonly recognised as the gold standard approach for sodium intake evaluation. Furthermore, this method is frequently used to evaluate and validate alternative sodium consumption assessment methods.

Individual food consumption can be assessed using a variety of approaches. The 24-hour dietary recall (24 HDR) is intended to record every food and beverages ingested over a 24-hour period. The interview is frequently organised in order to aid the respondent in recalling all foods ingested throughout the day. National surveys frequently employ this strategy. The distribution of single daily intakes might be rather diverse. To calculate the typical consumption, it is convenient to interview a subsample on a separate day (preferably on a weekday and one weekend). The USDA's Automated Multiple-Pass Method (AMPM), which is utilised in the US National Health and Nutrition Examination Survey (NHANES) and involves five phases to retrieve missed foods, is a novel methodology from 24 HDR [4,5].

Conclusion

The food frequency questionnaire (FFQ) is a dietary evaluation tool that has also been utilised in major epidemiologic diet and health investigations. Over a specified length of time, the participant records the frequency of consumption and portion size of food and beverages. In the FFQ approach, the breadth of the food list is crucial. This method is often used in risk studies and is particularly capable of quantifying intake associated with prolonged exposure. The diet record (DR) is a written record of all foods and beverages taken over the course of seven days, or sometimes three days, as well as their proportions. DR requires the weighing of all consumed food and is typically reserved for research projects because to its high cost and complexity.

Acknowledgement

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Conflict of Interest

None.

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