Prizes for weight loss
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A programme of weight loss competitions and associated activities in Tonga, intended to combat obesity and the noncommunicable diseases linked to it, has popular support and the potential to effect significant improvements in health.

The Kingdom of Tonga, in the South Pacific, has a population of about 100,000 spread over six main island groups. Until relatively recently the people ate mainly root crops, fish, other seafood, various kinds of meat, coconut, fruit and vegetables, but increasing quantities of fatty and refined foods are now being consumed. Moreover, most people used to do agricultural work involving considerable physical activity, and walking was common as there were few motor vehicles, whereas today there are more office jobs than formerly, and motorized vehicles have become comparatively common, resulting in a great decrease in physical exercise.

In 1986, 39% of women and 10% of men were obese, having body mass indices of 30 and 32 respectively (1). The Body Mass Index is defined as weight (in kilograms) divided by height (in metres) squared, expressed as kg/m². There was a fourfold increase in annual admissions of diabetic patients at Vaiola Hospital between 1971 and 1991 (2). A diabetics unit was established in 1994 to tackle the increased prevalence of diabetes and diabetic complications.

A Health and Weight Awareness Programme was initiated in 1995 by the Tonga National Food and Nutrition Committee, together with national weight loss competitions lasting six or four months. This project, which is being implemented by the Nutrition Unit of the Central Planning Department, endeavours to make losing weight and gaining fitness an enjoyable experience.

Activities and administration

A Tongan translation of the South Pacific Commission's weight chart has been prepared, in which for both sexes the cut-off point in body mass index value is 27 for overweight and 32 for obesity (3). The chart is used to identify obesity and overweight and to determine eligibility for the competitions. Advice leaflets have been prepared which give simple guidelines for losing weight and starting a fitness programme (see box).

Equipment for measuring height and weight has been obtained and a network of weigh stations has been established. The rules for the competitions require that participants be weighed monthly at designated centres and that weight loss be gradual. In the first competition, prizes were awarded solely in respect of total weight loss. Subsequently, the additional categories of "reaching healthy weight-for-height" and "maintaining weight loss" were introduced. Special attention has been given to the need for gradual and maintained weight loss.

Each weigh station is equipped with a height measure, scales, a registration book, a weight-for-height poster, diet and exercise advice leaflets, a healthy foods poster, hypertension leaflets and a competition flier with information on the rules, prizes and other matters. Some weigh stations are intended only for use by the personnel of the organizations where they are set up, for instance banks, whereas others are open to the general public in the hospital, post office, some main government offices, and church and community groups.

Each weigh station has a manager who carries out weighing and recording on a voluntary basis in addition to her or his basic duties. When possible, measurements are also made of blood pressure and body fat percentage. The managers attend meetings at which training is provided on the measurement

Advice on diet and exercise

- Set one weight loss goal per month and one for the duration of the competition.
- A good result is a weight loss of between 0.5 kg and 1 kg per week.
- Draw up an exercise programme lasting 30–60 minutes a day.
- Eat fish, seafood, green leaves and root crops; consume reduced amounts and take three meals a day.
- Choose snacks of fresh fruit or vegetables.
- Eat less fatty, sugary and salty foods.
- Form a weight-losing group among family or friends; weigh yourselves and take exercise together.
- Think positively!
of weight and height, uniformity of record-keeping is encouraged, interest is stimulated, and experiences are shared.

Difficulties have arisen in connection with the care and maintenance of scales; some scales have been broken, and it is necessary for some to be shared by different stations. Either beam balances or electronic scales are used; both are satisfactory except that in a few cases it is not possible to weigh people because they exceed the scales’ capacity of 140 or 150 kg. To eliminate the problem of variability between scales, each participant is required to be weighed only at one weigh station for the duration of a competition.

The project is publicized through local television, newspapers and, predominantly, radio, this medium being used to advertise the competitions as enjoyable activities. The regular radio programmes of the Ministry of Health and the Tonga National Food and Nutrition Committee feature the competitions, and press releases are issued for the local weekly newspapers. Interviews with persons who have succeeded in losing weight and with others involved in the programme stimulate much interest in the community. In the international press, special interest has been shown in what are the first national competitions of their kind in the world. This has lent further encouragement and has helped to secure resources for the programme.

Exercise is encouraged as an important part of the weight loss competitions. Aerobics classes have been initiated in community groups, and an aerobics programme has been introduced in primary schools. The health educators of the Ministry of Health have been trained to give instruction in this field.

Special attention is given to walking as a form of exercise that can easily be incorporated into the daily routines of people of all ages. A monthly walk-for-health programme has been started in which members of the public participate in walks of eight kilometres, advance notice of which is given in the mass media. Occasionally, printed T-shirts are offered as incentives to participate. Between 50 and 200 people take part each month on the main island, and walks are also organized in the outer island groups. People are also encouraged to work in gardens and agricultural plots and to engage in physical tasks in their homes.

Local businesses have provided attractive prizes, including overseas and domestic air tickets, cash, sports shoes and T-shirts. A local airline has offered a $10 discount on an air ticket for every kg of weight loss. Various government and nongovernmental offices make their premises and staff available so that the weigh stations can function.

The support of King Taufa’ahau Tupou IV has greatly boosted the programme. His weight loss of 70 kg over 20 years has provided an important example of what can be achieved. In 1997 he initiated a healthy lifestyle programme in which people are encouraged to:

- have healthy diets;
- take adequate exercise;
- practise moderation in the consumption of alcohol;
- refrain from using tobacco and other drugs.

The King presents prizes at ceremonies attended by dignitaries and participants in the competitions. Fitness displays are presented and words of encouragement and acknowledgement are delivered.

**Achievements**

The total weight lost by the 983 participants in the first competition was 1168 kg, and that lost by the 1313 people in the second competition was 1335 kg. Both of these competitions lasted six months. The percentages of participants who completed these competitions were 33% and 50% respectively; 229 and 367 individuals succeeded in losing weight. The third competition lasted only four months because of staff changes; 57% of the 1133 participants completed it and 361 lost a total of 1143 kg.

A survey of 140 participants conducted nine months after the end of the second competition revealed that 69% of them had regained some or all of the weight lost. Nevertheless, the maintenance of weight loss by 31% was a worthwhile achievement. It is hoped that the prize category “maintaining weight loss” will encourage participants to keep their weight down.

It is hoped that a greater understanding of Tongan cultural values and attitudes concerning food, eating, exercise and body size (4), and of their relevance to health programmes, will help to resolve the obesity problem. In this connection it is noteworthy that:

- more obesity occurs among girls than boys;
- girls tend to be less positive than boys about healthy food and exercise;
- fatalistic views exist about health conditions;
- health programmes tend to be too prescriptive.

The weight loss programme in Tonga is making a positive contribution towards combating obesity and associated noncommunicable diseases. There are difficulties connected with equipment, cultural values and attitudes, and weight gain following the competitions. Nevertheless, there is great public interest in the programme and a strong demand for its activities.

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Encouragent l'exercice, les cours d'aérobic et la marche, cette dernière occupant une place d'autant plus privilégiée qu'elle peut être facilement intégrée dans les activités quotidiennes des personnes de tous âges.

Pour récompenser les lauréats, des entreprises locales ont offert des prix attrayants, un geste qui n'a fait qu'accroître la popularité du projet. Le soutien du Roi Taufa'ahau Tupou IV a dynamisé le programme, sa perte de poids de 70 kg en 20 ans donnant un aperçu des résultats qui pouvaient être obtenus. Le Roi a participé aux cérémonies de remise des prix et lancé un programme en faveur d'un mode de vie sain où l'on encourage les individus à adopter un régime alimentaire équilibré, à faire suffisamment d'exercice, à boire avec modération et à s'abstenir de fumer et de prendre des drogues. Sur les trois concours organisés entre 1995 et 1997, la perte de poids totale par concours oscillait entre 1168 kg et 1335 kg, le nombre de participants par concours allant de 983 à 1133. Le prix principal récompensait la perte de poids totale. Toutefois, d'autres prix sont également venus récompenser ceux qui avaient atteint leur poids de santé par rapport à leur taille, et qui étaient parvenus à le maintenir.

Il faut espérer qu'une meilleure compréhension des valeurs culturelles et des comportements aidera à résoudre le problème de l'obésité et favorisera plus encore l'adoption d'un régime alimentaire équilibré et la pratique d'un exercice. Le programme rencontre certains difficultés, dont la reprise de poids des participants à l'issue des concours. Mais l'intérêt populaire que le programme et ses activités suscitent est grand, ce qui laisse espérer une amélioration sensible de la santé.
los participantes. El reglamento del concurso hace hincapié en que el adelgazamiento debe ser gradual. La versión tongana de la tabla de la Comisión del Pacífico Sur relativa al peso corporal distingue entre el exceso de peso y la obesidad, definiendo el exceso de peso a partir de un índice de masa corporal de 27 y la obesidad a partir de un índice de 32. Se han preparado directrices para adelgazar y mejorar el estado físico, folletos sobre la hipertensión y carteles sobre los alimentos saludables. Como parte del concurso de adelgazamiento se fomentan el ejercicio físico, las clases de aeróbica y la formación de grupos de caminantes. Se recomiendan en especial las caminatas porque se pueden incorporar fácilmente en la actividad cotidiana a cualquier edad.

Las empresas locales han donado premios atractivos para los ganadores y ello ha aumentado la popularidad de los concursos. El apoyo del Rey Taufa’ahau Tupou IV ha dado un gran impulso al programa; el Rey mismo perdió 70 kilos en 20 años y constituye un ejemplo de lo que es posible conseguir. Ha participado en las ceremonias de entrega de los premios y ha iniciado un programa de fomento de un modo de vida sano mediante el cual se alienta a la gente a comer alimentos sanos, hacer suficiente ejercicio físico, beber con moderación y abstenerse del tabaco y de las drogas. En cada uno de los tres concursos organizados entre 1995 y 1997 se perdieron un total de 1168 a 1335 kg y el número de participantes por concurso osciló entre 983 y 1133. Mientras que la principal categoría premiada fue la de pérdida total de peso, también se entregaron premios al logro de un peso saludable para la altura y al mantenimiento de la pérdida de peso.

Se confía en que, mediante una comprensión más profunda de los valores y actitudes culturales, se ayudará a resolver el problema de la obesidad y a promover más activamente la alimentación saludable y el ejercicio físico. Aunque se tropieza con dificultades, por ejemplo el aumento de peso de los participantes una vez finalizado el concurso, el programa ha despertado un gran interés popular y sus actividades, que son objeto de una demanda firme, pueden mejorar significativamente la salud.

**References**