

and cancers are concerned [review in Corpet et Gerber (1996), *Med Nutr*; Gerber et Corpet (1996), *Med Nutr*]. However, this diet takes various forms in different countries and its protective element(s) – whether it would be nutrient(s), specific food(s), food group(s), or eating habit(s) remains unknown.

The specific objectives of this study are the following: 1) to precise the various Mediterranean diets in different countries (Southern France, Italy and Spain) through quantitative and qualitative nutritional surveys and to compare with Northern countries (South-West and East of France, England, Belgium). The foods and the nutrient showing the largest variation of intake among these countries will be correlated with health indexes (cardio-vascular mortality and cancer incidence); 2) to evaluate changes in food habits and to understand why people are changing; 3) to identify the socio-economic limits and constraints to maintain this model in Mediterranean countries and its extension to Northern countries. To fulfill these objectives a multidisciplinary approach is followed, gathering nutritional epidemiologists, nutritional anthropologists and socio-economists.

Preliminary results of the quantitative nutritional survey of 438 subjects among the representative sample from département de l'Hérault show that the mean nutritional balance is good and indicative of the keeping of Mediterranean diet (high consumption of vitamins from fruit and vegetables and of vegetable oils shown in the PUFA/SFA ratio). Women eat less of everything than men, but more yoghurts, olive oil, fruit and vegetables, that results in more carotenoids and vitamin C. This difference between men and women is the same as between urban and rural subjects, respectively. Young people eat more of everything than aged subjects except for the Mediterranean foods: fish and sea-food, fruit and vegetables, olive oil and other vegetal oils,

and wine, which is an indication of the possible disappearance of the Mediterranean diet in our region. Certain population groups display peculiar behaviour: rural women appear to keep the traditional local food habits, with more cabbage, more delicatessen, more olive oil, and more wine than the other women; retired people meet the characteristics of the healthiest diet, close to the Mediterranean diet, but it remains to precise whether this choice is dictated by tradition or by health concerns. Finally, urban, single, unemployed or without profession women appear to favour high caloric food, bread but also delicatessen, pastries and sweets, and wine whereas the intake in fish, poultry, vegetables, citrus and vegetal oils is very low. Moreover, they attend twice as much the fast-food places than the other women of the sample.

Dietary underreporting and cognitive restriction in obesity. JM Oppert, A Basdevant, C Craplet, M Cottini-Passos, B Guy-Grand (*Service de médecine et nutrition, Hôtel-Dieu, 75004 Paris, France*).

Dietary underreporting is increasingly recognized as an important bias in the study of associations between nutrition and health.

The aim of this study was to identify characteristics of subjects considered as underreporters (UR) in a sample of obese patients (body mass index, $BMI \geq 27 \text{ kg/m}^2$) at their first visit to a Nutrition department, and especially to investigate relationships between underreporting and dietary cognitive restriction.

419 obese patients (336 females/83 males, age: 41.7 ± 0.6 year, $BMI: 37.5 \pm 0.5 \text{ kg/m}^2$, $m \pm SEM$) including 151 (36%) morbid obese subjects ($BMI > 40$) were studied (dietary history, presence of restriction). Subjects that were losing weight were excluded. Using the methodology described by Goldberg et al [Goldberg et al (1991),

Eur J Clin Nutr 45, 569-581], underreporting was defined with a value < 1.14 for an individual subject in the ratio (energy intake)/(basal metabolic rate computed according to Schofield).

Using this criteria, 55% ($n = 229$) of the subjects were classified as UR. The proportion of women was increased in the UR group compared to non-UR subjects (91% vs 67%, $P < 0.000,001$) and analyses were performed separately in each gender. In women as in men, obese UR compared to non-UR were characterized by an increased protein intake (about 20% vs 15% of total energy intake, $P < 0.000,001$) and an increased proportion of restraint subjects ($P < 0.05$), whereas age and BMI were comparable between the two groups.

In conclusion, in obese patients seeking advice in a hospital setting, dietary under-reporting: 1) concerns predominantly female subjects, 2) may be related to certain macronutrients, and 3) appears to be associated with dietary restriction.

Cooking and dressing fats in Sardinia and Corsica. AM Carcassi¹, J Giannettini², I Carta¹, R Coinu³, P Pranzetti³, A Luciani² (¹*Fisiologia Umana, Università, Via Porcelli, 4, 09124 Cagliari, Italy*; ²*Faculté des sciences, université de Corse, BP 52, 20250 Corte, France*; ³*Fisiologia Generale, Università, Via Muroni, 25, 07100 Sassari, Italy*).

The type of fat used in cooking and dressing is essential to ensure a proper intake of saturated, monounsaturated and polyunsaturated fatty acids. The aim of this work is to compare the eating habits on two islands of the Mediterranean Sea. The research was performed from written answers to a questionnaire which involved 1 022 Sardinian and 465 Corsican families. The statistical analysis (χ^2 test) shows significant differences ($P < 0.001$) between the two islands:

- for sauce preparation, meat and fish cooking, at least 75% of the Sardinian families use olive oil whereas two Corsican families out of three use other vegetable oils;
- for salad dressing of raw and cooked vegetables, a large majority of the Sardinian families (> 90%) use olive oil whereas in Corsica, although 65% of the families consume olive oil, 23% used other vegetable oils;
- for frying, Sardinian families use other vegetable oils (64%) more often than olive oil (34%). In Corsica, other vegetable oils are mostly used (88%);
- finally, for pastry, we note an important use of solid fats: in Sardinia, lard (39%), butter (36%) and margarine (27%) are prevalent whereas in Corsica it is butter (65%).

Consequently, these two neighbouring islands of the Mediterranean Sea show very different habits in their consumption of fats.

Nutritional consequences of the migration of North-African subjects to Seine Saint-Denis. P Miossec, B Betari, F Sedjari, J Paries, Jr Attali, P Valensi (*Nutrition and Metabolic Diseases Laboratory, Jean Verdier Hospital, Paris Nord University, avenue du 14 juillet, 93140 Bondy, France*).

Two hundred and seven healthy adult subjects, born in Maghreb and living in France for more than 1 year (group M) were compared to ninety-six healthy French age-matched subjects born in France (group F) regarding food intakes and anthropometric and metabolic parameters. Mean age (39 ± 0.7 vs 40.8 ± 0.9 year) and sex ratio were similar in the two groups. In M the total caloric intake was higher than in F ($2\,580 \pm 97$ vs $1\,997 \pm 52$ Kca/day; $P < 0.001$) but the lipid (35.4 ± 0.4 vs $40.0 \pm 0.5\%$; $P < 0.001$), carbohydrate (49.8 ± 0.5 vs $42.7 \pm 0.7\%$; $P < 0.001$) and protein (14.9 ± 0.3 vs $17.4 \pm 0.4\%$; $P < 0.001$) intakes were closer to the