



## Opticourses (Optishop) – An interventional research project to reduce social inequality in nutrition and health in the northern districts of Marseilles (<http://opticourses.fr/>)



An article by **Nicole Darmon** and members of the Opticourses team:

C Dubois, H Gaigi, MS Gaubard, A Lesturgeon, A Maidon.

UMR NORT of the faculty of medicine of Timone at Marseilles, France.

### Public Health Nutrition

In previous research, our team has found that energy dense food often have low amount of essential nutrients and are the cheapest providers of calories (1), making it more difficult to achieve a balanced diet for a person who is subject to severe budgetary constraints (2). But by using a modelling approach, we have also shown that it is possible to design a balanced food basket with a modest budget (3). The minimum food budget for a nutritionally adequate diet was estimated at €3.5 per day per person.

#### Why choose the northern districts of Marseilles?

The social situation there is very deprived: very low incomes; heavy financial dependence on social benefits, over-representation of people covered by arrangements for controlling poverty and people covered by free social security.

Problems of mobility and shopping are more acute there than elsewhere: long journey times to the rest of the town.

Distant from the town centre, this area suffers from a shortage of services and nearby shops. Such shops are few in number: 94 inhabitants for one shop or local service compared with 30 inhabitants on average for one in Marseilles; few post offices, no bank.

In order to have a balanced diet on a small budget, it is necessary to select particular foods with a very good nutritional quality/price ratio. These foods have been identified by diet modelling (3;4) or on the basis of favourable nutritional profiles (1;4;5). In general, pulses, nuts, oils and whole-grain cereals were foods with a very good nutritional quality/price (NQP) ratio. Among animal products, milk, eggs, poultry, organ meats, and canned sardines are also cited as foods with a good nutritional quality/price ratio. If these

theoretical studies are to be believed, it would then be more difficult, but not impossible, to eat a balanced diet with a small budget, but is it realistic, and how does one go from theory to practice? To find out, The Opticourses (Optishop) project was launched in 2012 in the northern districts of Marseilles. Funded for two years by the National Cancer Institute (INCA) in France after two innovative actions financed by Regional Health Agency, Opticourses (Optishop) aims to reduce societal health inequality due to diet.

The Opticourses (Optishop) project aims to improve the nutritional quality/price (NQP) ratio of the food purchases of people claiming to be facing financial problems.

Following one of the main principles of the National Nutrition and Health Program (PNNS), the project starts from the principle that to modify food consumption favourably and sustainably, one must act on both the demand and the supply (see figure). The **"demand"** part of the project is based on participatory workshops, and the **"supply"** part relies on intervention of social marketing in shops.



<http://opticourses.fr/>

→ Deprived districts (North of Marseilles)

Demand

#### Group workshops

Based on the use of participants' actual purchases (**till receipts**) and lists of foods with a good nutritional value/price ratio and their « threshold prices »

Supply

#### Intervention in nearby supermarkets

To make available, visible and attractive the foods with a good nutritional value/price ratio

## Act on the demand through participatory workshops

In order to increase the demand for foods with a good NQP ratio, workshops (five 2-hour sessions) were arranged in different places situated in the northern districts of Marseilles. During the first year of the project about a hundred people took part in these workshops in about ten venues (social centres, medical centres etc.).

The workshops were based on the people's actual purchases and notably on their **till receipts**, which they were asked to keep for a month, in a **notebook of food purchases**.



During the 5 sessions, the till receipts are used as tools:

- **For intervention:** participants and other contributors discuss the receipts brought in by them all and exchange ideas around them, or examples.
- **For diagnosis:** a financial and nutritional analysis of the purchases of the month is carried out by the research team and communicated to each participant
- **For advice:** on the basis of this analysis, an improvement objective is negotiated with each participant

The **sharing of experiences and strategies** to buy cheaply is sought during these workshops. For example, meat is a major item in the household food budget. Several solutions emerge to try to reduce the cost of these foods: reduce the portions, buy meat with a better NQP ratio (poultry rather than red meat for example). The participants exchange good ideas; some of them know where to buy at very competitive prices (the flea market, clearance shops, the Old Port market at the end of the morning etc.). Some people on a low budget also employ certain strategies such as

clubbing together to buy in bulk and then share out and store food (for example by freezing it from fresh), use of promotions, etc.

By going back and forth between research and practice, **concrete tools** have been created and made available to the workshop participants. This is the case for example of the **tool called "threshold price"**, which was developed by the team by adapting an initially theoretical approach (4) to the concrete case of people doing their shopping on a low budget (6). This tool is a little booklet shaped like a visiting card (see opposite). The foods shown there all have a good nutritional quality. They are all accompanied by a price called the "threshold price". That is to say that below this price, this food, besides being of good nutritional quality, also has a good NQP ratio. Thus, if the price shown in the shop is below the threshold price for a given food, it is a bargain! For example, the threshold price of sweet peppers is 1.85€/kg. Hence, if the price of a sweet pepper in the shop is below the threshold price, it is a bargain because it is not only good for one's health but also cheap. However if the price exceeds 1.85€/kg, we don't suggest that you shouldn't buy it, because it has good nutritional value.



"**The tasting game**" is also proposed to the participants. It is played in groups. They are offered several food products in succession, each in three versions: a discounted brand (Carrefour discount), a supermarket's own brand (Carrefour), and a national brand. Nutritional analyses based on the labelling (nutritional contents and ingredients) are carried out on the products offered at the tasting. These products, whatever their brand, are of similar nutritional quality.

**Blind tasting** sessions are offered during workshops on simple foods (bread without crust, orange juice, Emmental cheese, etc.), with the same selling name and similar nutritional quality but different prices and brands (discount brand, supermarket's own brand and a national brand). For each type of product, the three versions are identified by a letter "A", "B", or "C" (which changes with each product). Only one of the organizers prepares the samples and knows which product was attributed the letter A, B or C. The organizer inviting the participants to test the products and recording their impressions is also unaware of which is which. Everyone expresses his/her taste preferences. The results are often surprising: certain products are very similar in taste and some top price ones are unanimously preferred by the tasters. In the end, the superiority of certain brands is questionable, as is the generally accepted idea that "if it's expensive, it's because it's better".

The effect of participation in the workshops on food purchasing behaviour is evaluated by means of an innovative method: **experimental economics**. The buying behaviour of the participants at the workshop is observed in a controlled but realistic experimental situation and similar to that of a real shopping situation (7). In the form of a game, each participant has to prepare a food list for his/her family for the two days to come. For this he/she has a catalogue of 250 reference foods, a sort of virtual shop. A technique specific to experimental economics enables one to induce the people to reveal true preferences: they are told that they will receive a shopping voucher if they return to the next workshop session with a till receipt showing that they really bought the foods

which they chose in their virtual basket. To measure the impact of the workshop, this little game is played twice: before and after the workshops.

## Influencing the supply by means of social marketing

The research team also intervenes in **two "discount" shops** (DIA retailer) in the northern districts in order to influence the food supply. In collaboration with the agency Link Up, a specialist in **social marketing**, a campaign to promote foods with a good NQP ratio has been launched (from January until June 2014). This **public health campaign** has the aim of making good NQP foods visible, available and attractive.

For 6 months, all the foods with a good NQP ratio in the shop (identified by the research team) are put **at the front of the shelves**. Consumers can spot them thanks to a logo, "EAT TOP", accompanied by the claim "Nutritious and inexpensive; that's TOP". Good NQP foods are presented with the support of flyers and **recipes**, simple and accessible to everyone. Also, placings at the head of the gondola and in-store **exhibitions** are planned around star foods of the month.

During the first two months, fish and canned foods will be given the most prominence. Consumers will find in the flyers made available: nutritional information, tips and tricks for cooking them, simple cheap recipes (less than 1€ per person) combining these good NQP foods (sardine rillettes, tuna pâté, etc.) and a TOP selection of good NQP foods available in the store.

### The "TOP" social marketing campaign



We believe that **this intervention will bring about a change in the perception of these foods**, which will result in a change in purchasing habits. The change in perceptions will be assessed by a qualitative study and the change in purchases will be evaluated by a statistical analysis of sales before, during and after the action, in the experimental shops and in control shops.

## In conclusion

Opticourses (Optishop) is an **interventional research project, which is based on a participatory and territorial approach. This multidisciplinary research employs expertise in nutrition, dietetics and public health, but also economics, geography, sociology and social marketing.** The concepts arising from the research serve as a basis to build, together with the target public and all the actors involved in the project, protocols for intervention and evaluation, and suitable teaching materials. Conversely, the information gathered in the course of the project will serve for the advancement of knowledge in the various domains covered by the project, notably nutrition and public health.

## References

1. Maillot M, Darmon N, Darmon M, Lafay L, Drewnowski A. Nutrient-Dense Food Groups Have High Energy Costs: An Econometric Approach to Nutrient Profiling. *J Nutr* 2007;137:1815-20.
2. Darmon N, Drewnowski A. Does social class predict diet quality? *Am J Clin Nutr* 2008;87:1107-17.
3. Darmon N, Ferguson EL, Briend A. Impact of a cost constraint on nutritionally adequate food choices for French women: an analysis by linear programming. *J Nutr Educ Behav* 2006;38:82-90.
4. Maillot M, Ferguson EL, Drewnowski A, Darmon N. Nutrient profiling can help identify foods of good nutritional quality for their price: a validation study with linear programming. *J Nutr* 2008;138:1107-13.
5. Drewnowski A. The Nutrient Rich Foods Index helps to identify healthy, affordable foods. *Am J Clin Nutr* 2010;
6. Dubois, C., Gaubard, M. S., and Darmon, N. Identification des aliments de bon rapport qualité nutritionnelle-prix pour le projet de recherche interventionnelle OPTICOURSES. Journées Francophones de Nutrition, Bordeaux. 11-13 Décembre 2013, poster. 2013. Generic
7. Darmon N, Lacroix A, Muller L, Ruffieux B. Food Price Policies Improve Diet Quality while Increasing Socioeconomic Inequalities in Nutrition. *Int J Behav Nutr Phys Act* 2014;in press:

