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## **Press file**

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### **Action on dietary behaviours**

#### ***Regulation, marketing and influence of health communications***

#### ***A collective expert review by Inserm***

The role of nutritional factors (diet and exercise) in the development of overweight and obesity and in the occurrence of many chronic diseases such as cancers, cardiovascular disease, diabetes and osteoarthritis is now scientifically well established. These diseases are the leading cause of mortality worldwide, and the number of patients affected continues to rise.

The World Health Organisation (WHO) estimates that there were over 1.9 billion overweight adults in 2014, 600 million of whom were obese. In France about one third of adults are overweight, and 15% (7 million) are obese. Apart from the problems encountered by these individuals, overweight and obesity also have an important cost for society. For France, their financial cost was estimated at €4 billion in 2008. According to WHO, the projections indicate that by 2030, 25% of French men and 29% of French women could be obese.

To cope with this rise in obesity in France, the State has, since 2001, established a public policy of nutritional health by launching the French National Nutrition and Health Programme (PNNS). In 2007, an order of the 2004 Public Health Act requires that advertisements for manufactured food products and drinks with added sugars, salt or artificial sweeteners must contain health information. This provision applies to all media (television, radio or advertising displays).

These messages are now well known to the public (5 fruits or vegetables a day, etc.). However, over time, surveys show that they are attracting less and less attention and that their visibility is uneven, depending on the medium. Moreover, the method of disseminating messages generates problems of comprehension, and they are sometimes seen as an endorsement of the products shown in the advertisement.

In late 2013, Santé Publique France requested Inserm to carry out a collective expert review in order to take stock of the scientific knowledge, and to analyse the impact of health messages disseminated by the mass media on cognition, attitudes, intentions and behaviours.

This expert review is based on a critical analysis of the international scientific literature<sup>1</sup> conducted by a multidisciplinary group of ten experts who are researchers in the areas of marketing and management sciences, law, political science, economics, cognitive psychology, social psychology, information and communication sciences, and the neurosciences.

The texts from this expert review are grouped into three parts: the first part provides some background on the legislation and on the impact of marketing on dietary behaviours; the second part provides an update on various aspects of assessing media-based nutrition campaigns; finally, a third part analyses the psycho-cognitive mechanisms involved in the reception and processing of health messages<sup>2</sup> by individuals.

The review also includes recommendations made by the expert group, which are detailed below:

## **I. Establish laws restricting food marketing activities to which children are exposed.**

Marketing is well known to have an impact on nutritional preferences, particularly those of children. The expert group recommends **reducing exposure of children to marketing for products of poor nutritional quality**, and limiting its effects, for example by prohibiting television advertisements for certain food products during times of the day when a large number of children watch television. The group also recommends a **prohibition on the use of techniques with a particularly strong power of persuasion**, such as the use of a brand spokesperson (sports player, singer, etc.).

The expert group proposes the establishment of measures to **limit strategies whereby manufacturers move from one communication medium to another**. Indeed, when restrictions target only a small number of media, or even just television, the law allows companies the possibility of extending their marketing to other communications media increasingly favoured by children, such as websites, social networks or mobile telephones.

Finally, the experts **recommend the creation of an independent monitoring body**, so that marketing practices comply with the directives put in place by France.

## **II. Rethink the system for including health messages on advertisements**

Health messages can have counter-productive effects. The presence of a banner in an advertisement leads some people to think that the product being advertised is good for health. The experts recommend **separating the health message from the advertising content**. Instead of a banner, the

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<sup>1</sup> See box on page 7

<sup>2</sup> The term “health messages” used in these recommendations covers the nutrition-related health information placed on banners embedded in advertisements. The term “nutritional messages” covers all the other preventive or health promotional communications actions. Here the concept of nutrition covers diet and exercise.

group suggests, for example, **placing full-screen health messages at the beginning or end of the advertisement**. According to the scientific literature, the first and last pieces of information seen are generally easier to remember in the long term.

If the health message system is not modified in its present form, the expert group then recommends **extending the use of the system to other communications media**: web videos, promotional objects, screen wallpaper, food-related gaming apps on mobile phones and tablets, pop-up windows, etc.

### **III. Design messages that suit the different attention levels of the recipients**

Research on advertising, persuasive communication and psychology shows that, depending on the type and level of attention that the “recipient” pays to the message, the effects can be conscious (“explicit”) or unconscious (“implicit”): even when no attention is paid to the health message, the latter can still bring about changes in attitudes.

The experts recommend **designing health messages that can attract different levels of attention**. There are 5 levels of attention, from the most implicit to the most explicit

- Level 1: readers who pay no attention to the health message;
- Level 2: readers who pay very slight attention to the health message;
- Level 3: readers who consciously or unconsciously associate a cognitive representation with another, and/or with an affective reaction;
- Level 4; readers who pay “moderate” attention and process the message using simple rapid judgement and decision rules;
- Level 5: readers who pay greater attention to the message, analysing the arguments in detail in a systematic process.

#### ***Optimise the implicit influence approach and targeting of lower attention***

For people to whom levels 1-3 apply, the expert group recommends **improving the visual structure and form of health messages**. The absence of common structures and forms impedes the formation of good perceptual and conceptual flow.

The experts recommend designing health messages showing:

- an area greater than 7% of the advertisement
- a highly contrasting background colour
- a systematically identical visual structure and form on all banners
- an eye-catching animation system
- variable placement in the advertisement to avoid habituation
- a regular change in the statements in order to encourage people to read the banners, and avoid habituation or even saturation

#### ***Maximise the explicit influence approach***

For level 4 and 5 readers, the expert group recommends **using nutritional messages that are simple, easy to understand, specific and easy to apply**. These messages should also be personalised and issued by a credible source (government, or professionals involved in health or academic research).

### **Communication actions intended for the general public**

**Messages using humour or positive emotions are more effective.** They optimise attention and memorisation. Another feature of humour is that it encourages individuals to follow recommendations so that they adapt/adjust their behaviours.

**Messages that involve well-known figures or peer testimonials** are recommended, to increase credibility and gain the confidence of the public.

**Exercise-related messages placed in appropriate places** (e.g. at the foot of stairs or escalators) **are more effective** in changing behaviours. This is shown by studies evaluating nutrition campaigns in the media.

**Nutritional messages that make the most of personal abilities encourage and promote behavioural changes in an individual.** Indeed, work carried out in various disciplines has shown that adoption of healthy behaviours primarily encounters psychological mechanisms of resistance to change and persuasion. Personal ability can be exploited through enhancing the perception of personal effectiveness, by emphasising individual success (“You will get there”). It can also be implemented by affirming or emphasising certain aspects of the individual’s personality.

**Messages that use implementation, making the individual an actor and not merely the recipient.** Individuals are asked to decide when, where or how they will act. That allows the individual to see that s/he is free to choose, and reduces the effect of resistance. To do this, the more interactive and individualised traditional or digital media through which the individual acts (website, mobile app, serious game, games, quizzes, etc.) can be suitable media.

The expert group proposes approaches to composing messages using rhetorical methods: **increase personal involvement** “This means you” or “You are personally involved” and **counter unrealistic comparative optimism on the part of the target** (tendency to perceive positive events as more likely to happen to oneself than to others and negative events as less likely to happen to oneself than to others).

The experts also believe that messages should be perfectly intelligible, especially by reducing the ambiguity of notions such as “regular exercise” (What does regular mean?) “too fatty” or “too sweet” (What is too fatty or too sweet?).

### **Targeted communication actions**

The use of communication media varies depending on whether one is addressing one population category rather than another. The expert group recommends **developing the use of modulated messages that follow the target audience**, using a variety of communication methods such as the web, mobile phones, connected devices, etc.

Messages should adapt to different social and cultural meanings associated with food. According to the experts, it is necessary to adapt to personal values and goals (e.g. “enjoyment” and not explicitly

going against the social identities in which people “feel good,” so as not to promote negative reactions.

Promotion of exercise and a balanced diet among children and adolescents **must be suited to their age, abilities** (especially in reading) **and interests**. The expert group recommends the use of playful messages, using characters appreciated by children and adolescents, and associated with their specific interests. The use of an image or pictogram may be considered.

#### **IV. Systematically pre-test the impact of actions**

The experts insist on the need to pre-test all planned communication strategies in a natural setting before launching them. This means **measuring the impact on behaviours**, and not just on attitude to the preventive measure, **beliefs, intentions or memorisation, over time, by testing in a controlled setting and then in a natural setting** (for example in businesses, restaurants, supermarkets, towns, etc.).

These assessments must be designed, carried out and analysed **in a transparent manner by competent and independent teams from the agrifood industry**.

→ The authors of this expert review have also formulated 4 **recommendations for research**:

- **Find out more about the target populations**, their motivations and their expectations;
- **Continue to conduct research on the possible effects of health messages embedded in advertisements** (present system), such as implicit effects;
- **Find out more about the cognitive and behavioural mechanisms** associated with nutritional messages;
- **Perform better analysis of “integrated marketing” by industries**.

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[Link to the summary available online at www.inserm.fr](http://www.inserm.fr)

Since its creation in 1993, Inserm's Collective Expert Review has been entrusted with a mission of expert review and knowledge transfer for many institutional bodies and decision-makers (Ministries, Agencies, etc.) in the area of public health.

This mission, performed by the Collective Expert Review Unit attached to the Thematic Institute for Public Health, provides scientific insight to assist decision-making in matters of public policy on health. The Collective Expert Review Unit provides scientific framing, bibliographic support, coordination and exploitation for collective expert reviews.

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The expert review "Action on dietary behaviours. Regulation, marketing and influence of health communications," has taken over two years of work and the critical analysis of approximately 700 scientific documents.

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