

### Nutrition education: the right way and the wrong way

### Laura Gennaro

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The views expressed in this presentation are purely the authors' own and do not reflect the views of the European Commission.



The media today are full of information about nutrition. Breaking news about health and fitness can be found almost daily on television. Most major newspapers devote regular columns to nutrition, health, and dieting. Even the Internet focuses on health!

People do indeed use the media as a source of information about nutrition, and television and magazines are relied upon more often for nutritional guidance than are family and friends. At the same time, many adults also feel that the media contain information that is often confusing and contradictory.

In one recent study, adults who reported more confusion and skepticism about nutrition messages in the media also were more likely to eat a fat-laden diet. The authors of the study speculated that the proliferation of media information may be contributing to a nutrition backlash among certain subgroups of people. Science and society speak different languages and they often don't understand each other

> From research findings to changes in behaviours

Why it is so difficult?

Science wants to qualify Media wants to semplify

### Italian media and press about food and health:

### Who is guilty?





### Mothers' fault

### No fish or vegetables, like mummy

Il Messaggerd	Data 11-10-2005 Pagina 39 Foglio 1/3
Studio del Bambino Gesù sulle abitudini alimentar a tavola si evitano cibi sgraditi e poco conosciuti	
Niente pesce o ve imitando man	

### Snacks' fault

### Less snacks, more health

PROGETTI EUROPEI AL VIA LA CAMPAGNA ANTIOBESITÀ

### Meno merendine, più salute

Ingredienti leggeri, informazioni chiare e niente pubblicità rivolta ai bambini: così cambierà l'industria alimentare. **di ANNA MARIA ANGELONE** 

hi credeva che l'ondata salutista in Europa si sarebbe esaurita 🖉 con la guerra ai fumatori farà bene a mettersi l'anima in pace. È infatti in arrivo una crociata, ben più imponente, contro i chili di troppo. Destinata a far comparire sul mercato cibi meno calorici, a dare un'informazione più chiara di ciò che finisce in pancia, forse a vietare la pubblicità diretta ai bambini del cosiddetto «junk food», quella spazzatura fatta di fritti, merendine e bevande zuccherose nociva alla linea e alla salute. Con un obiettivo prioritario: migliorare le abitudini alimentari e lo stile di vita di centinaia di milioni di persone.

Davanti ai dati allarmanti sull'obesità Bruxelles ha deciso di mettere intorno allo stesso tavolo grande industria, distributori, catene di ristorazione, pubblicitari, consumatori, nutrizionisti e governi per studiare le soluzioni. Per il momento non sarà imposto alcun obbligo o divieto. «Il 15 marzo lancerò a Bruxelles una piattaforma su dieta, attività fisica e salute per frenare e, spero, invertire la tendenza registrata sull'aumento dell'obesità» anticipa a *Panorama* il commissario europeo alla Sanità e sicurezza dei consumatori, Markos Kyprianou. «L'accordo porterà gli attori chiave a lavorare insieme per prendere misure volontarie, ma concrete e verificabili».

In assenza di risultati, non si escludono diktat futuri. «È chiaro che se questo processo fallisse» prosegue il commissario Kyprianou «non avrei altra alternativa che considerare la via della legislazione. Del resto, stiamo già preparando norme sulle etichette nutrizionali da varare il prossimo anno».

La tabella di marcia prevede un primo incontro a maggio: ciascuno, produttori di alimenti e bevande anzitutto, dovrà dire cosa sta facendo e cosa propone per una corretta alimentazione. I piani dovrebbero essere pronti in estate, comunque entro il 2005. Un punto si farà nel 2006, ma si prevede che nuove misure siano prese prima.

Dove si Interverà? «Mi aspetto provvedimenti in merito a educazione e informazione dei consumatori, marketing dei prodotti, promozione dell'attività fisica, composizione dei cibi e quantità delle confezioni» elenca Kyprianou. «Vorrei che l'industria non rivolgesse più direttamente ai bambini messaggi pubblicitari di alimenti con alto contenuto di grassi, zucchero e sale, come già hanno scelto alcune aziende». È il caso della Kraft Foods, che ha rinunciato a fare spot di biscotti, patatine e bibite ai più giovani.

È su questa fascia di età che il giro di vite sarà più stretto. Stando ai dati dell'International obesity taskforce, l'obesità colpisce in tutto il mondo oltre un miliardo di persone. E non è più solo un problema degli Usa, dove

17/3/2005 Panorama • 95

### Tv and genes fault

### Fat kids, snacks are absolved. "It's fault of TV and genes"

la Repubblica	ed. Milano	Data 05-05-2005 Pagina 9 Foglio 1
IL CASO	Sovrappeso in aumento anche per i giovanissimi Allarme dei ricercatori	"Tre ore al giorno davanti al piccolo schermo e in città è peggio che in campagna"
Bambin	i grassi, mere	endine assolte
	dellatvedel	
ANNA ERECONARA	— Milano la ricer- bambini d	i Legnano, il 68,1 per bus e i ragazzi vanno in classe a

#### ANNA FREGONARA

BAMBINI obesi. La colpa non è da cercare nei fuoripasto, bensì

ca "Bambini, fuoripasto e obesità". Secondoidatiraccoltiinternellan.

cento degli iscritti alle elemen- piedi accompagnati da due getarifagiochiall'aperto e alle me- nitori" racconta Silvana Mazza, die la percentuale scende già al 42 As spiega Michala Carruba

responsabile dell'unità operati-

### Anxiety fault

### Obesity, it's fault of anxiety, too.

## Quotidiano Napoli Direttore: Mario Orfeo Lettori Audipress 665000 10-OTT-2005 Obesi, è anche colpa dell'ansia

Oggi la giornata contro il sovrappeso. Informazioni e controlli in 140 centri sanitari

Un ragazzino su quattro mangia continuamente I prodotti mediterranei per aiutare gli oversize GATY SEPE

GLI AMERICANI SONO SPACciati: per nove uomini e sette donne su dieci il destino che conduce all'obesità è già tracciato. L'Europa è messa società Astra per conto di Coldiretti. Secondo lo studio, per la maggioranza degli italiani è il pranzo il pasto principale della giornata, anche se il 27% punta sulla cena, mentre un elevato 22% non mangia niente alla prima colazione. «Una cattiva abitudine che - sostiene la Coldiretti - risulta accentuata tra le giovani generazioni che in un caso su tre dichiarano di rinunciare al pasto del mattino».

Una tendenza, questa, evidenziata anche da una ricerca pubblicata sul «Journal of The American Dietetic Association» condotta su 2400 ragazze provenienti da stati diversi nel Paese che celebra il rito del breakfast. Tutte le

### Diet fault

### Frequent efforts to lose weight lead to obesity

MF	Data Pagina Foglio	05-05-2005 17 1
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### Frequenti tentativi di dieta portano all'obesità

di Andrea Torti

uali sono i fattori che lasciano prevedere se una ragazza svilupperà in età adulta l'obesità? I ricercatori ne hanno identificato tre: la depressione, genitori obesi e frequenti, radicali tentativi di controllare il peso. Stranamente, come risulta da uno studio pubblicato su *The Journal of Consulting and Clinical Psychology*, non vengono più considerati i tradizionali fattori di rischio come la mancanza di esercizio fisico, il consumo di cibi grassi e un ritmo di alimentazione molto disordinato. Dall'esame su 496 teenager seguite per cinque anni è risultato che le più inclini a diventare obese erano quelle che assumevano emetici e pesanti lassativi. (riproduzione riservata)

### Diet fault

Esperimento Usa: solo chi apprezza gli alimenti riesce a stare in forma «Le diete? Fanno male» Meglio il cibo intelligente La scoperta: lo stress da calorie aumenta il colesterolo

ne perennemente in guerra con la li- tra metà delle volontarie è stato invenea. Le diete non funzionano. Non fan- ce semplicemente consigliato di osserno dimagrire, perché i chili col tempo vare stili di vita più morigerati, non pesi riprendono tutti. E non si procura- sarsi, assecondare l'appetito naturano neppure i benefici di salute che ci le, conoscere le qualità nutrizionali si aspetterebbe. In discussione tutti dei cibi, apprezzare il proprio corpo roquei regimi alimentari basati su strin- tondo, sviluppare un'immagine positigati protocolli e calcoli severi di gram- va di se stesse, movimento. Un apmi e calorie. Al contrario, mangiare proccio ribattezzato «salute per ogni con raziocinio, con porzioni ridotte, taglia». ma senza gravose rinunce è un sistema molto più efficace sul piano della I RISULTATI – Dopo 6 mesi le donne a forma e del benessere generale. Cole- dieta avevano perso chili, ma li hanno sterolo cattivo e pressione ne traggo- recuperati nel giro di due anni, le altre no giovamento in modo duraturo. Si afferma il principio del «mangia quel- rò mai ingrassare. La pressione è scelo che vuoi», non dimenticando però sa in ambedue i gruppi, ma le seconde di dare adeguato spazio quotidiano al- hanno mantenuto i valori. In quanto l'esercizio fisico.

RILASSATI COL CIBO - Il mito delle diete restrittive subisce una nuova picconata con lo studio pubblicato sul Journal of the American Dietetic Association, numero di giugno. «Si possono ottenere significativi miglioramenti a livello di metabolismo e salute psicologica senza affanni. Potete rilassarvi col cibo», conclude Linda Bacon, Università di California, una delle ricercatrici. Lo studio ha interessato un campione di 78 donne comprese nella fascia d'età più a rischio di obesità, tra 30 e 45 anni. Per 6 mesi la metà ha partecipato a una dieta tradizionale e a un programma basato su una serie di regole: come contare le calorie e i grassi, leggere le etichette degli alimenti al supermercato, aggiornare un diario

col resoconto della giornata a tavola, ROMA - Buone notizie per le don- usare la bilancia, esercizio físico. All'al-

> invece sono rimaste stabili, senza peal colesterolo, solo quelle del «mangia

> ciò che vuoi» lo hanno visto calare in modo significativo e duraturo. I ricercatori californiani fanno notare: «E' ben documentato che le diete falliscono a lungo termine nel 90-95% dei casi. Noi dimostriamo che anche i miglioramenti di salute e le sane abitudini, ad esempio l'attività sportiva, non vengono mantenuti. Non solo. La qualità della vita peggiora». Secondo la Bacon, le stesse conclusioni valgono anche per gli uomini.

GLI ERRORI - Enrico Arcelli, docente di scienze motorie all'università di Firenze, è d'accordo: «L'attenzione morbosa al cibo è controproducente. Tanto maggiori sono gli obblighi tanto meno

vengono rispettati. Le costrizioni non ripagano. Il segreto è assimilare informazioni corrette che aiutano a scegliere e non riducono in schiavitù. E' una delle ragioni per cui sono un convinto sostenitore della dieta a "zona", dove i carboidrati hanno la prevalenza, il 40%, controbilanciati dal 30% di proteine. Uno schema salutare, appagante.

non rigido». Nazario Melchionda, endocrinologo, autore di «Le diete fanno ingrassare», riporta l'attenzione sul movimento fisico: «La maggior parte delle persone non ne capisce l'importanza e continua a ridurre l'apporto calorico mentre invece il fattore fondamentale del successo è lo sport. Calare di peso in modo artificiale non fa bene, occorre raggiungere un equilibrio psico fisi-

co». Nel libro appena pubblicato «Mangiare bene, mangiare sano» Renzo Pellati, specialista in scienze dell'alimentazione, traccia la strada che conduce verso il peso ideale. Così scrive: «L'importante è cambiare lentamente le proprie abitudini alimentari sbagliate. Se il soggetto è forte mangiatore sarà opportuno soddisfare il senso di sazietà con cibi poco calorici. come ortaggi, frutta e con poco condimento. Se eccede in alimenti ricchi di grassi, come formaggi, salumi, carne, dolci farciti di creme, si ridurranno gradatamente le dosi. Se esagera in un solo pasto bisognerà ridistribuirlo in vari spuntini. In ogni caso è un errore demonizzare il cibo».

Margherita De Bac

"Diets? They hurt". Stress from Kilocal increases

cholesterol

## Consequences of mediatic chaos Strong emotional impact on the general public Temporary changes in nutritional behaviour Negative impact on health

### 1. Press paradox



### 2.Advertisement paradox

From a COOP research ("In bocca al lupo", 2007):

If a child, in Italy, would watch TV three hours a day, only in the protected time (broadcasted specifically for children), he risks to watch, in one year, about...

...10.816 commercials on food (more or less 30 per day)!!! **1:** Obes Rev. 2005 Aug;6(3):203-8.

Full text



Evidence of a possible link between obesogenic food advertising and child overweight.

### Lobstein T, Dibb S.

International Obesity TaskForce, London, UK. childhood@iotf.org

A significant

association was found between the proportion of children overweight and the numbers of advertisements per hour on children's television, especially those advertisements that encourage the consumption of energy-dense, micronutrient-poor foods (r = 0.81, P < 0.005). A weaker, negative association was found between the proportion of children overweight and the number of advertisements encouraging healthier diets (r = -0.56, P < 0.10). Beyond-brand effect of television (TV) food advertisements/commercials on caloric intake and food choice of 5-7-year-old children.

#### Halford JC, Boyland EJ, Hughes G, Oliveira LP, Dovey TM.

Kissileff Laboratory for the Study of Human Ingestive Behaviour, School of Psychology, Eleanor Rathbone Building, Bedford Street South, University of Liverpool, Liverpool L69 7ZA, UK. j.c.g.halford@liverpool.ac.uk

Food advert exposure has been shown to influence calorie intake and food choice in 9-11 year olds. However, little is known about the effect of food advertisements on feeding behaviour in younger children. Therefore, we conducted a study with 93 children aged 5-7 years, 28 of whom were over weight or obese. The children were exposed to 10 non-food adverts and 10 food adverts in a repeated measures design. Their consumption of sweet and savoury, high and low fat snack foods, and fruit were measured following both sessions. Food advert exposure produced a significant increase in total food intake in young children. The collection of recognition data was incomplete. These data replicate previous findings in that exposure to food adverts increases food intake in all children, but recognition of food adverts is related to body mass index (BMI). Beyond their effects on brand choice, exposure to food advertisements (commercials) promotes over-consumption in younger children.

Low levels of physical activity have been observed in children 3-5 years old, and sedentary activity (measured by TV time) and having a TV in the bedroom have been associated with risk of overweight Several studies have examined the content of food advertising aimed at children. In general, these studies have shown that food commercials are dominated by advertisements for high calorie foods with low nutritional quality.

Moreover, these commercial messages can impact children's food preferences and consumption.

Overall, children who watch more television tend to espouse more "pro junk food" attitudes and beliefs, request more advertised foods/drinks, and consume more calories.

### Study: Food in McDonald's wrapper tastes better to kids (3-5 years)

Archives of Pediatrics & Adolescent Medicine 2007(Effect of fast food branding on young children's taste preferences)

CHICAGO, Illinois (AP) -- Anything made by McDonald's tastes better, preschoolers said in a study that powerfully demonstrates how advertising can trick the taste buds of young children.

In comparing identical McDonald's foods in name-brand and plain wrappers, the unmarked foods always lost.

Even carrots, milk and apple juice tasted better to the kids when they were wrapped in the familiar packaging of the Golden Arches.

The study had youngsters sample identical McDonald's foods in name-brand and unmarked wrappers. The unmarked foods always lost the taste test.

"You see a McDonald's label and kids start salivating," said Diane Levin, a childhood development specialist who campaigns against advertising to kids. She had no role in the research.

Levin said it was "the first study I know of that has shown so simply and clearly what's going on with (marketing to) young children."

The study included three McDonald's menu items (hamburgers, chicken nuggets and french fries. French fries were the biggest winner: almost 77 % said the labeled fries tasted best. 54 % preferred McDo'-wrapped carrots versus 23 % who liked the plain-wrapped sample





Diet, nutrition and the prevention of chronic diseases - WHO/FAO, 2003

Policy principles for the promotion of healthy diets and physical activity

Governments need to <u>work together</u> with the private sector, health professional bodies, consumer groups, academics, the research community and other nongovernmental bodies if sustained progress is to occur.

## Diet, nutrition and the prevention of chronic diseases - WHO/FAO, 2003

Policy principles for the promotion of healthy diets and physical activity

Change can only be initiated through <u>effective</u> <u>communication</u>. The core role of health communication is to <u>bridge the gap between</u> <u>technical experts, policy-makers and the</u> <u>general public.</u>

The proof of effective communications is its capacity to create awareness, improve knowledge and induce long-term changes in individual and social behaviours – in this case consumption of healthy diets and incorporating physical activity for health.

# Nutrition educators have some major challenges

They need to design messages that attract attention, make sense, and help to encourage changes in what are often entrenched attitudes and behaviors in the target audience.

### Which is the audience? Children, but.... also parents!

The American Dietetic Association segments target into 3 groups based on people's nutritional beliefs and behaviors.

The first group, the "**I'm already doing it**" segment, consists of individuals who are knowledgeable about nutrition and are already eating healthfully and exercising. This segment, is presumably eager for the latest nutrition information and does not need strong persuasive tactics.

The second group, the "**I know I should but** . . ." segment, is made of people that are knowledgeable about nutrition and believe healthful eating is important, but they do not necessarily practice health-promoting behaviours. Health messages for this group need to overcome behavioral rather than attitudinal resistance.

The final group, the "**don't bother me**" segment, is the toughest to change.

About one third of adults do not care, are in denial, or have other concerns that seem more crucial.



### The source of the message: the problem is the stigmatization

Overweight and obese children are vulnerable to weight stigma from other sources, in addition to that from peers. Educators, parents and even health professionals have been reported to stigmatise obese children.



Studies conducted in the early 1960s revealed high degrees of discrimination towards the obese among elementary school students .

Elementary school students are strongly biased against obese peers. All children, regardless of their own body weight, tend to hold negative attitudes towards obese children. It was also found that weight stigma exists among obese as well as among normal and underweight individuals.

Weight stigmatization begins at an early age. Studies reported that 3–5-year-old pre-school children described an overweight child to be more mean and undesirable playmate in comparison to an average-weight child. Others have found that even preschool children ascribe more negative characteristics to fat figures than to normal ones. Children, starting at the age of 3, associate overweight individuals with being mean, stupid, ugly, unhappy, lazy, and having few friends.

### The source of the message.

Source similarity is another variable that has been studied. A source can be perceived as similar to the audience on a number of dimensions, such as age, gender, ethnicity, occupation, and even body type.



Some weight management companies have used celebrities such as Kirstie Alley as spokespersons because they, too, like the target audience, have struggled with their weight.

In controlled studies, source similarity has been found to increase persuasive effectiveness, decrease it, and have no effect. Such inconsistent findings suggest that the impact of similarity probably depends on a host of other factors in the situation.

Studies suggest that attractive sources are generally more persuasive than unattractive ones. But some researches indicates that physical attractiveness is less effective than source credibility in terms of persuasive impact. Especially on group three (the "Don't bother me").

The mechanism, in this case, is "I will never be like you"



## Nutrition is not only macro and micronutrients requirement

is our cultural and traditional background is affectivity, emotion is sociability



No positive result from education and communication can be expected when food is considered just a mere fuel and <u>nutrient</u> <u>provider</u>



No positive result from education and communication can be expected when it is done on topics that are not considered <u>"important" by the target</u>



Eating is an important source of pleasure.

### You should never say to children that a food is good or bad!!!

In fact, almost all elementary-age and half of middle school children already believe that there are good and/or bad foods.

Actually, no single food or type of food ensures good health, just as no single food or type of food is necessarily detrimental to health.

Rather, the consistent excess of food, or absence of a type of food over time, may diminish the likelihood of a healthful diet.

For example, habitual, excessive consumption of energy-dense foods may promote weight gain and mask possible underconsumption of essential nutrients. Yet small quantities of energy-dense foods on special occasions have no discernible influence on health. In most situations, nutrition messages are more effective when focused on positive ways to make healthful food choices over time, rather than individual foods to be avoided.

Unfortunately, the current mix of reliable and unreliable information on diet and nutrition from a variety of sources is confusing to the public and elicits negative feelings such as guilt, worry, helplessness, anger, fear, and inaction.

### Some experiences



### Genova, 26/10 - 07/11/2006





### LABORATORY: "Alimenti e salute con gusto"



### <u>Babies' place</u>: let's draw together. Right colour and correct names







Laura GENNARO-



### Aprile 2007



### At school with pupils

It is quite impossible to persuade pupils that what you are saying is right, if it is different from their daily behaviour.

You can teach them how to recognize mistakes, but most of all you can drive them into the knowledge of food.



They really don't care if in Cola there are seven sugar's spoons. Even if they care, they will tell you that they drink "cola zero!" (the one with aspartame, not safe for children)

But... telling them and showing them the quantity of sugar or the risk of aspartame, they will store the information somewhere.

### Making children aware could make the families, too

There is some evidence that parental **fruit and vegetable** intakes, knowledge of intake recommendations and skills has a positive association with children's intakes, whereas television viewing and exposure to television advertisementwere associated with lower intakes of fruit and vegetables.

More specifically, there are three different parental child-feeding patterns: 'authoritarian' (highly controlling), 'permissive' and lastly, 'authoritative' where parents set limits but modulate the degree of parental control. Researches indicates that highly controlling parenting may have a counter-productive influence on their children's diets, especially their fruit and vegetable intakes.



Other authors insist on a clear division of feeding responsibilities between children and adults.

This division consists of the adult being responsible for providing food that is appropriate for the child and repeatedly offering it in a positive environment, and the child being responsible for deciding how much of, or even if, the food item is eaten

We know that modeling is an important mechanism through which children learn food preferences and that children learn other kinds of behavior from televised models



The Food Dudes Healthy Eating Programme is a school-based intervention designed for use in primary schools that:

- Encourages children to eat fruit and vegetables both at school and at home
- Helps children develop a liking for fruit and vegetables
- Encourages children to become proud to think of themselves as healthy eaters
- Changes the 'culture' of a school to one that strongly supports healthy eating

#### http://www.youtube.com/watch?v=Ar2h6-j4ewM&feature=related

There are two main phases to the Programme:

### Phase 1 (16 days)

Each day, children are read a letter and/or watch a specially designed DVD episode (lasting 6 minutes) starring the "Food Dudes". There are 4 kids, super-heroes, who take from fruit and vegetables their force to fight and save the world.

The purpose of the Food Dudes is to provide influential role-models for children to imitate.

Children are then given a portion of fruit and a portion of vegetable and those who succeed in eating both the fruit and vegetable are given a small reward (e.g. juggling balls, pencils, pedometers etc).

The rewards are used at the beginning of the Programme to encourage children to repeatedly taste fruits and vegetables so that they begin to enjoy the taste of the foods.

#### Phase 2

In this phase the Programme continues to support successful eating of fruit and vegetables, but with less intensity than during Phase 1. Classroom Wall Charts are used to record consumption levels of these foods, and as the children achieve more advanced goals they earn further rewards and Food Dudes certificates.

#### Why does it work?

By using rewards and positive role-models, the Food Dudes Programme encourages children to repeatedly taste different fruits and vegetables. Repeated tasting of these foods allows children to discover the intrinsically rewarding properties of fruits and vegetables – in other words, they discover that fruit and vegetables actually taste really good!

BUT...

In similar projects, the effect was limited to the project duration. Availability of fruit and vegetables helps consuming more, but if children don't find at home the same offer and the same availability, and sometimes even if they find it, the effect probably don't last.

### Concluding....

Habits that protect against childhood obesity include:

- having breakfast every day
- eating more vegetables and fruit,
- being physically active.

and

 eating meals with family (who have breakfast and eat fruit and vegetables, without watching TV while they eat)

# Thank you!

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