CHEEP
cooking healthy european paths

La formazione dei docenti a cura del CNR

Stefania La Grutta, Velia Malizia, Alessandra Pandolfo,
Anna Bonomolo, Mauro Biondo

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KA201 - Strategic Partnerships for school education

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L'OBIETTIVO di questo progetto è **PROGETTARE e TESTARE** un **INNOVATIVO PERCORSO PILOTA** di apprendimento di itinerari in tutta Europa nel campo della **CUCINA SANA**.

Le scuole di alta cucina dei paesi partner **CHEEP** sono state coinvolte in un processo educativo innovativo per fornire conoscenze di contenuto specifico e competenze tecnologiche su percorsi di cucina salutare attraverso una pratica didattica e un ambiente di apprendimento mirati allo sviluppo e alla applicazione delle conoscenze.

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Webinar di cucina sana per insegnanti

- Fornire insegnanti di scienza dell'alimentazione
- Conferire nozioni scientifiche
- Diffondere la conoscenza teorica

Promuovere e sviluppare una cucina sana

Webinar di cucina sana per insegnanti

Individuato dei docenti che hanno partecipato al webinar

Webinar di cucina sana per insegnanti

messa a punto dell'infrastruttura tecnologica da utilizzare per il webinar

GoToMeeting

o

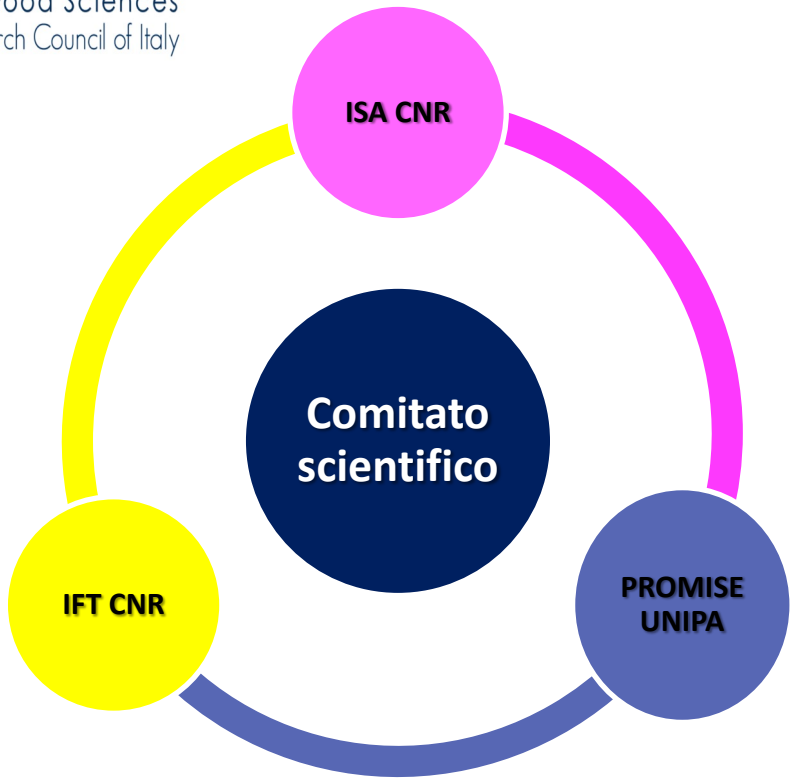
Microsoft Teams

Webinar di cucina sana per insegnanti

Composizione del comitato scientifico che ha tenuto il webinar

Dr. Fabio Lauria

Institute of Food Sciences
National Research Council of Italy



Dr. Stefania La Grutta

Prof. Carla Giordano

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UNIVERSITÀ DEGLI STUDI DI PALERMO

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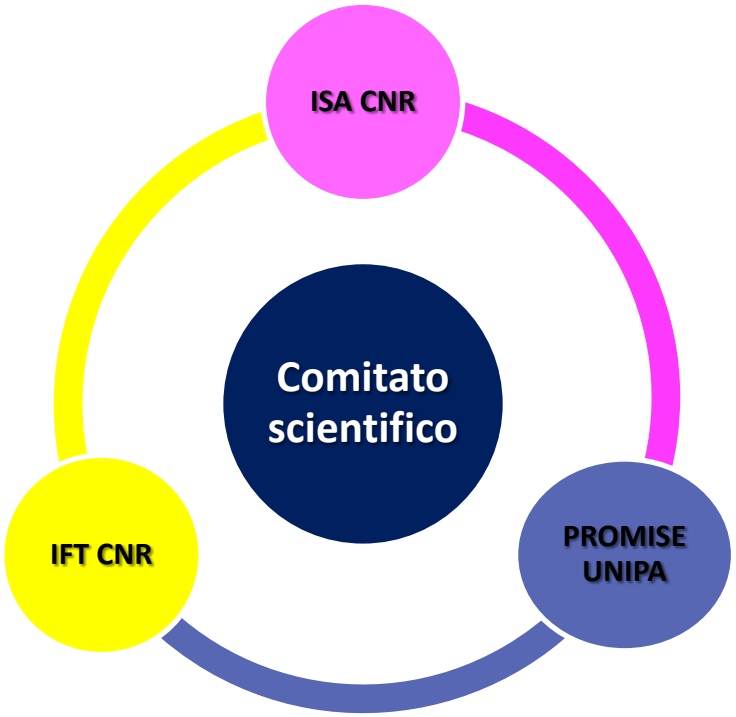
Cooking Healthy European Paths CHEEP

Webinar di cucina sana per insegnanti

Progettazione dei contenuti formativi del webinar



ex-ante questionnaire
TUESDAY 12th Jan 2021
3.30 PM – 5.00 PM CET
post-ante questionnaire

- Introduction
- From Giudelines To Practice
- Principles Of Healthy Diet
- Dietary Advice And Practice
- Q & A

FOOD ALLERGY

ex-ante questionnaire
TUESDAY 19th Jan 2021
3.30 PM – 5.00 PM CET
post-ante questionnaire

- Introduction
- From Giudelines To Practice
- Principles Of Healthy Diet
- Dietary Advice And Practice
- Q & A

DIABETES

ex-ante questionnaire
TUESDAY 26th Jan 2021
3.30 PM – 5.00 PM CET
post-ante questionnaire

- Introduction
- From Giudelines To Practice
- Principles Of Healthy Diet
- Dietary Advice And Practice
- Q & A

CELIAC DISEASE

ex-ante questionnaire
TUESDAY Feb 2nd 2021
3.30 PM – 5.00 PM CET
post-ante questionnaire

- Introduction
- From Giudelines To Practice
- Principles Of Healthy Diet
- Dietary Advice And Practice
- Q & A

OBESITY

Il webinar è stato registrato e liberamente accessibile attraverso i siti web.
E' stata usata la lingua ufficiale inglese.

January 19th 2021, 3:30 PM - 5:00 PM

DIABETES

prof. Carla Giordano

Università degli studi di Palermo

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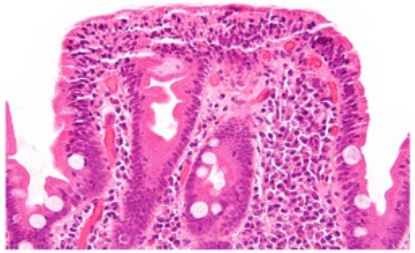
Introduction
From guidelines to practice
Principles of healthy diet
Dietary advice and practice

Download slides



February 9th 2021, 3:30 PM - 5:00 PM

CELIAC DISEASE

prof. Carla Giordano

Università degli studi di Palermo

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Introduction
From guidelines to practice
Principles of healthy diet
Dietary advice and practice

Download slides

All webinars have been uploaded and available on https://www.cheeproject.eu/index.php?option=com_content&view=article&id=10:o3&catid=11&Itemid=122

Webinar di cucina sana per insegnanti

CERTIFICATO DI ATTESTAZIONE

CERTIFICATE OF ATTENDANCE

TO: <<name>> <<surname>>

for successfully participating in the "Healthy cooking webinar for teachers" of the CHEEP project on the following dates:

<<webinar1>>
<<webinar2>>
<<webinar3>>
<<webinar4>>

ON BEHALF OF THE CHEEP PROJECT
CNR-IRIB, CNR-ITD

IRIB CNR
INSTITUTE FOR BIOMEDICAL RESEARCH AND INNOVATION
NATIONAL RESEARCH COUNCIL (CNR)

Co-funded by the Erasmus+ Programme of the European Union

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Utilizzando le presentazioni webinar sono stati creati materiali per gli studenti

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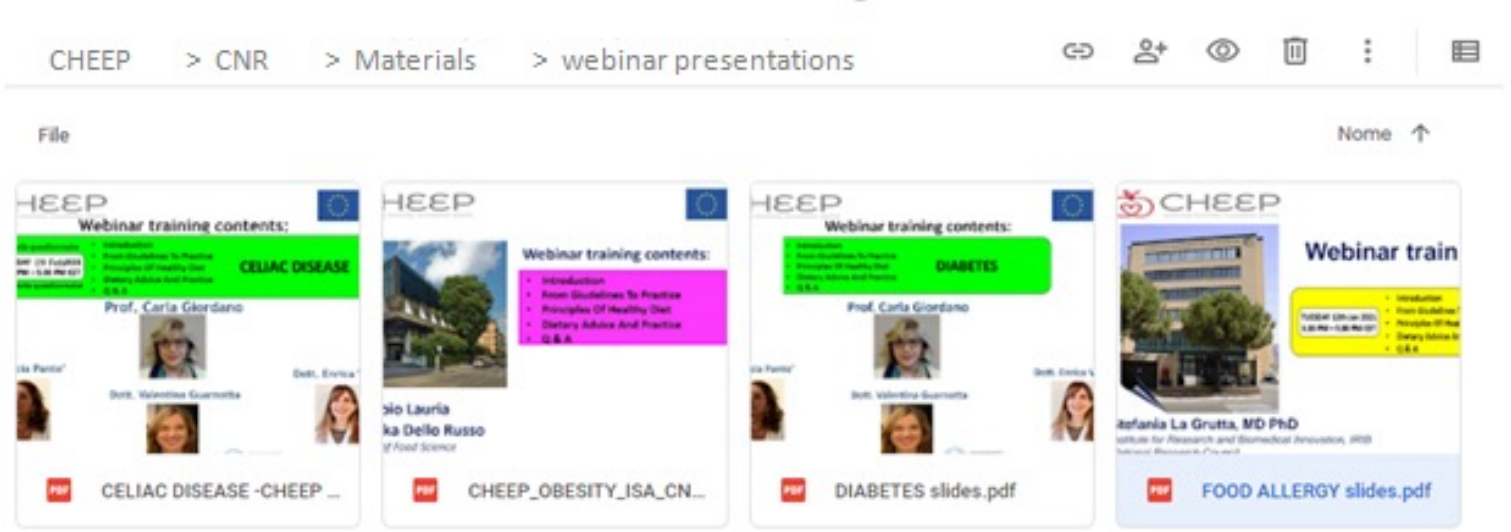
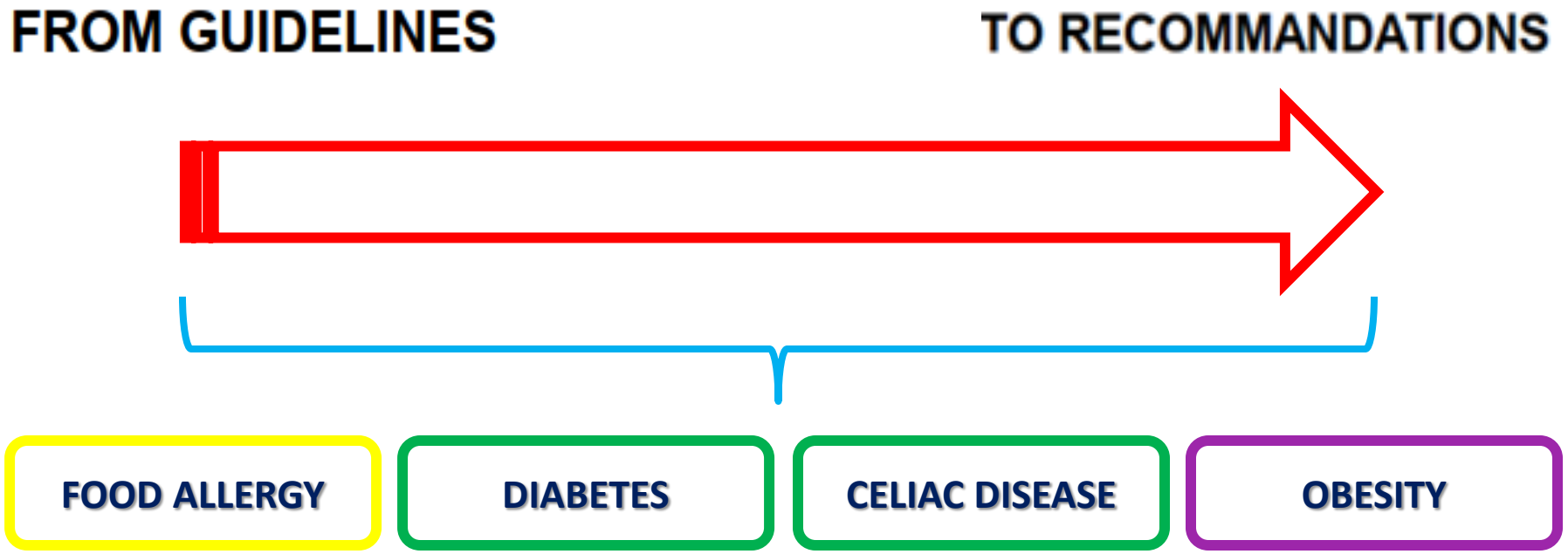


Materiale scientifico per l'implementazione dei contenuti del progetto per i curricula scolastici

Consiglio Nazionale delle Ricerche

- La nutrizione dei tumori: il ruolo del microbiota degli integratori
- Legame tra nutrizione e malattie neurodegenarive

Linee guida CNR per insegnanti e studenti per creare ricette adatte ad Allergia Alimentare, Diabete, Celiachia e Obesità



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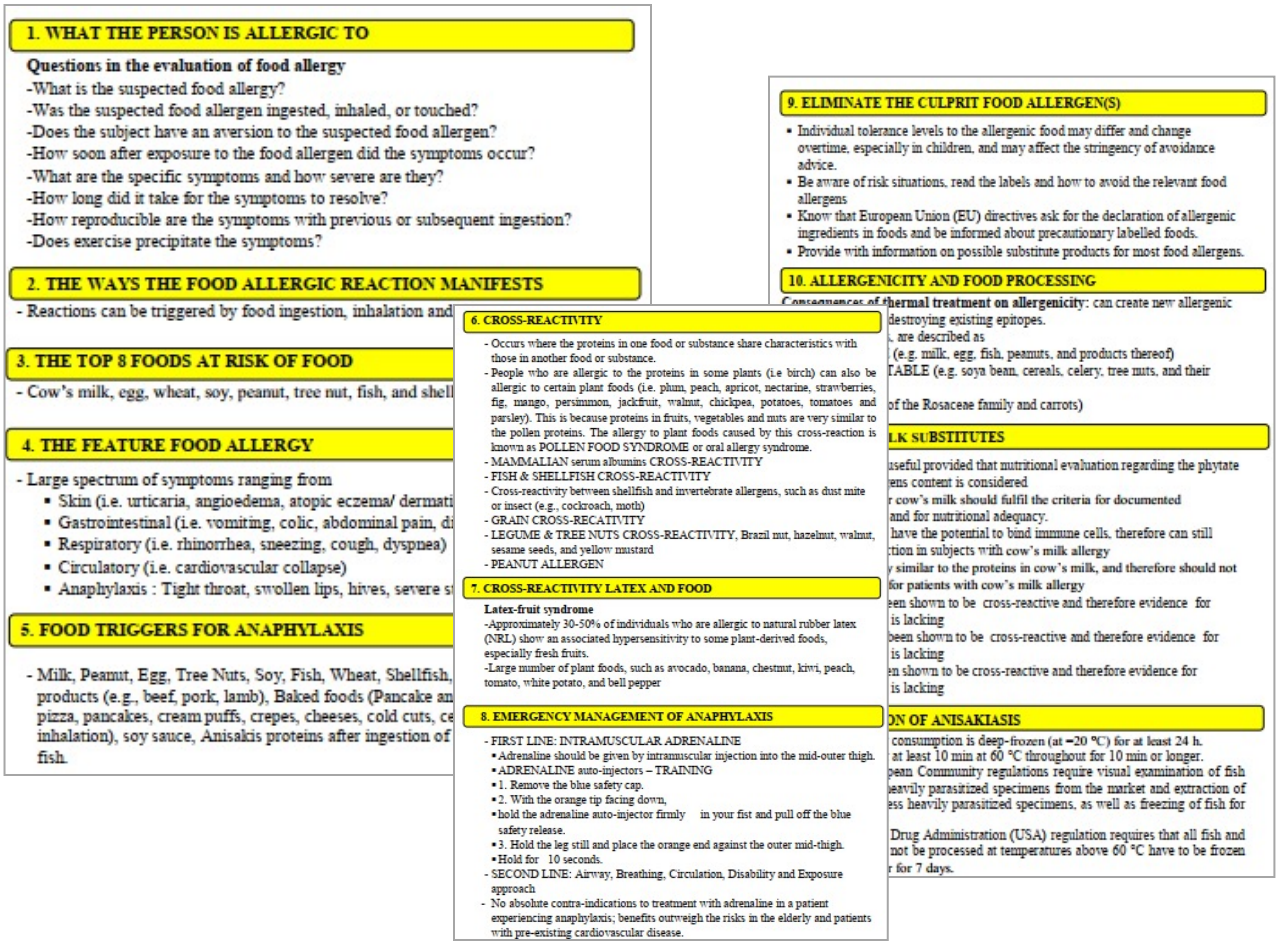
Linee guida CNR per insegnanti e studenti per creare ricette adatte ad Allergia Alimentare, Diabete, Celiachia e Obesità

FROM GUIDELINES TO RECOMMANDATIONS

FOOD ALLERGY



1. WHAT THE PERSON IS ALLERGIC TO

Questions in the evaluation of food allergy

-What is the suspected food allergy?
-Was the suspected food allergen ingested, inhaled, or touched?
-Does the subject have an aversion to the suspected food allergen?
-How soon after exposure to the food allergen did the symptoms occur?
-What are the specific symptoms and how severe are they?
-How long did it take for the symptoms to resolve?
-How reproducible are the symptoms with previous or subsequent ingestion?
-Does exercise precipitate the symptoms?

2. THE WAYS THE FOOD ALLERGIC REACTION MANIFESTS

- Reactions can be triggered by food ingestion, inhalation and

3. THE TOP 8 FOODS AT RISK OF FOOD

- Cow's milk, egg, wheat, soy, peanut, tree nut, fish, and shell

4. THE FEATURE FOOD ALLERGY

- Large spectrum of symptoms ranging from
  - Skin (i.e. urticaria, angioedema, atopic eczema/ dermati
  - Gastrointestinal (i.e. vomiting, colic, abdominal pain, di
  - Respiratory (i.e. rhinorrhea, sneezing, cough, dyspnea)
  - Circulatory (i.e. cardiovascular collapse)
  - Anaphylaxis : Tight throat, swollen lips, hives, severe s

5. FOOD TRIGGERS FOR ANAPHYLAXIS

- Milk, Peanut, Egg, Tree Nuts, Soy, Fish, Wheat, Shellfish, products (e.g., beef, pork, lamb), Baked foods (Pancake an pizza, pancakes, cream puffs, crepes, cheeses, cold cuts, ce inhalation), soy sauce, Anisakis proteins after ingestion of fish.

6. CROSS-REACTIVITY

- Occurs where the proteins in one food or substance share characteristics with those in another food or substance.
- People who are allergic to the proteins in some plants (i.e birch) can also be allergic to certain plant foods (i.e. plum, peach, apricot, nectarine, strawberries, fig, mango, persimmon, jackfruit, walnut, chickpea, potatoes, tomatoes and parsley). This is because proteins in fruits, vegetables and nuts are very similar to the pollen proteins. The allergy to plant foods caused by this cross-reaction is known as POLLEN FOOD SYNDROME or oral allergy syndrome.
- MAMMALIAN serum albumins CROSS-REACTIVITY
- FISH & SHELLFISH CROSS-REACTIVITY
- Cross-reactivity between shellfish and invertebrate allergens, such as dust mite or insect (e.g., cockroach, moth)
- GRAIN CROSS-RECATIVITY
- LEGUME & TREE NUTS CROSS-REACTIVITY, Brazil nut, hazelnut, walnut, sesame seeds, and yellow mustard
- PEANUT ALLERGEN

7. CROSS-REACTIVITY LATEX AND FOOD

Latex-fruit syndrome

-Approximately 30-50% of individuals who are allergic to natural rubber latex (NRL) show an associated hypersensitivity to some plant-derived foods, especially fresh fruits.
-Large number of plant foods, such as avocado, banana, chestnut, kiwi, peach, tomato, white potato, and bell pepper

8. EMERGENCY MANAGEMENT OF ANAPHYLAXIS

- FIRST LINE: INTRAMUSCULAR ADRENALINE
  - Adrenaline should be given by intramuscular injection into the mid-outer thigh.
  - ADRENALINE auto-injectors – TRAINING
  - 1. Remove the blue safety cap.
  - 2. With the orange tip facing down,
  - hold the adrenaline auto-injector firmly in your fist and pull off the blue safety release.
  - 3. Hold the leg still and place the orange end against the outer mid-thigh.
  - Hold for 10 seconds.
- SECOND LINE: Airway, Breathing, Circulation, Disability and Exposure approach
- No absolute contra-indications to treatment with adrenaline in a patient experiencing anaphylaxis; benefits outweigh the risks in the elderly and patients with pre-existing cardiovascular disease.

9. ELIMINATE THE CULPRIT FOOD ALLERGEN(S)

- Individual tolerance levels to the allergenic food may differ and change overtime, especially in children, and may affect the stringency of avoidance advice.
- Be aware of risk situations, read the labels and how to avoid the relevant food allergens
- Know that European Union (EU) directives ask for the declaration of allergenic ingredients in foods and be informed about precautionary labelled foods.
- Provide with information on possible substitute products for most food allergens.

10. ALLERGENICITY AND FOOD PROCESSING

thermal treatment on allergenicity: can create new allergenic
destroying existing epitopes.
, are described as
(e.g. milk, egg, fish, peanuts, and products thereof)
TABLE (e.g. soya bean, cereals, celery, tree nuts, and their
of the Rosacene family and carrots)

LK SUBSTITUTES

useful provided that nutritional evaluation regarding the phytate
ens content is considered
r cow's milk should fulfil the criteria for documented
and for nutritional adequacy.
have the potential to bind immune cells, therefore can still
tion in subjects with cow's milk allergy
similar to the proteins in cow's milk, and therefore should not
for patients with cow's milk allergy
en shown to be cross-reactive and therefore evidence for
is lacking
been shown to be cross-reactive and therefore evidence for
is lacking
en shown to be cross-reactive and therefore evidence for
is lacking

ON OF ANISAKIASIS

consumption is deep-frozen (at -20 °C) for at least 24 h.
at least 10 min at 60 °C throughout for 10 min or longer.
pean Community regulations require visual examination of fish
eavily parasitized specimens from the market and extraction of
ess heavily parasitized specimens, as well as freezing of fish for
Drug Administration (USA) regulation requires that all fish and
not be processed at temperatures above 60 °C have to be frozen
r for 7 days.

Google Drive

Linee guida CNR per insegnanti e studenti per creare ricette adatte ad Allergia Alimentare, Diabete, Celiachia e Obesità

FROM GUIDELINES TO RECOMMANDATIONS

DIABETES

1. Dietary composition in diabetes

—Medical nutrition therapy recommendations

Topic	Recommendation	Evidence rating
Carbohydrates	**5.11** Carbohydrate intake should emphasize nutrient-dense carbohydrate sources that are high in fiber and minimally processed. Eating plans should emphasize nonstarchy vegetables, minimal added sugars, fruits, whole grains, as well as dairy products.	B
	5.12 Reducing overall carbohydrate intake for individuals with diabetes has demonstrated the most evidence for improving glycemia and may be applied in a variety of eating patterns that meet individual needs and preferences.	B
Protein	**5.16** In individuals with type 2 diabetes, ingested protein appears to increase insulin response without increasing plasma glucose concentrations. Therefore, carbohydrate sources high in protein should be avoided when trying to treat or prevent hypoglycemia.	B
Dietary fat	**5.17** An eating plan emphasi… monounsaturated and p… metabolism and lower c…	
	5.18 Eating foods rich in long-… seeds (ALA), is recommer… does not support a bene…	
Micronutrients and herbal supplements	**5.19** There is no clear eviden… chromium and vitamin … outcomes in people wit… not generally recommer…	

8. Nutrition tables: bread and the like

Food	Proteins (gr)	Carbohydrates (gr)	Fats (gr)	Fiber (gr)	Kcal
Crackers	9.4	80.1	10	2.8	428
Biscuits	11.3	83	6	3.5	410
Focaccia	8.4	40.7	11.8	4.9	292
Breadsticks	12.3	69	13.9	3.5	433
Common bread	8.1	64.7	0.2	2.8	279
Rye bread	8.3	45.8	1.7	5.8	219
Whole bread	7.5	53.8	1.3	5.7	243
			5.9	3.1	302
			4	3.5	247
			0.5	4.1	298

…on use referring to 100 g of edible part

2. Mediterranean Diet

The **Mediterranean diet** is known to be the healthiest food pattern. It is mainly based on foods of vegetable origin: whole grains, fruits, vegetables, olive oil and legumes consumed frequently and in high quantities. Moderate consumption of fish, white meat, eggs and dairy products. Red meat, foods rich in sugars and sporadically saturated fatty acids, moderate salt intake.

Once a week

2-3 times/week

daily

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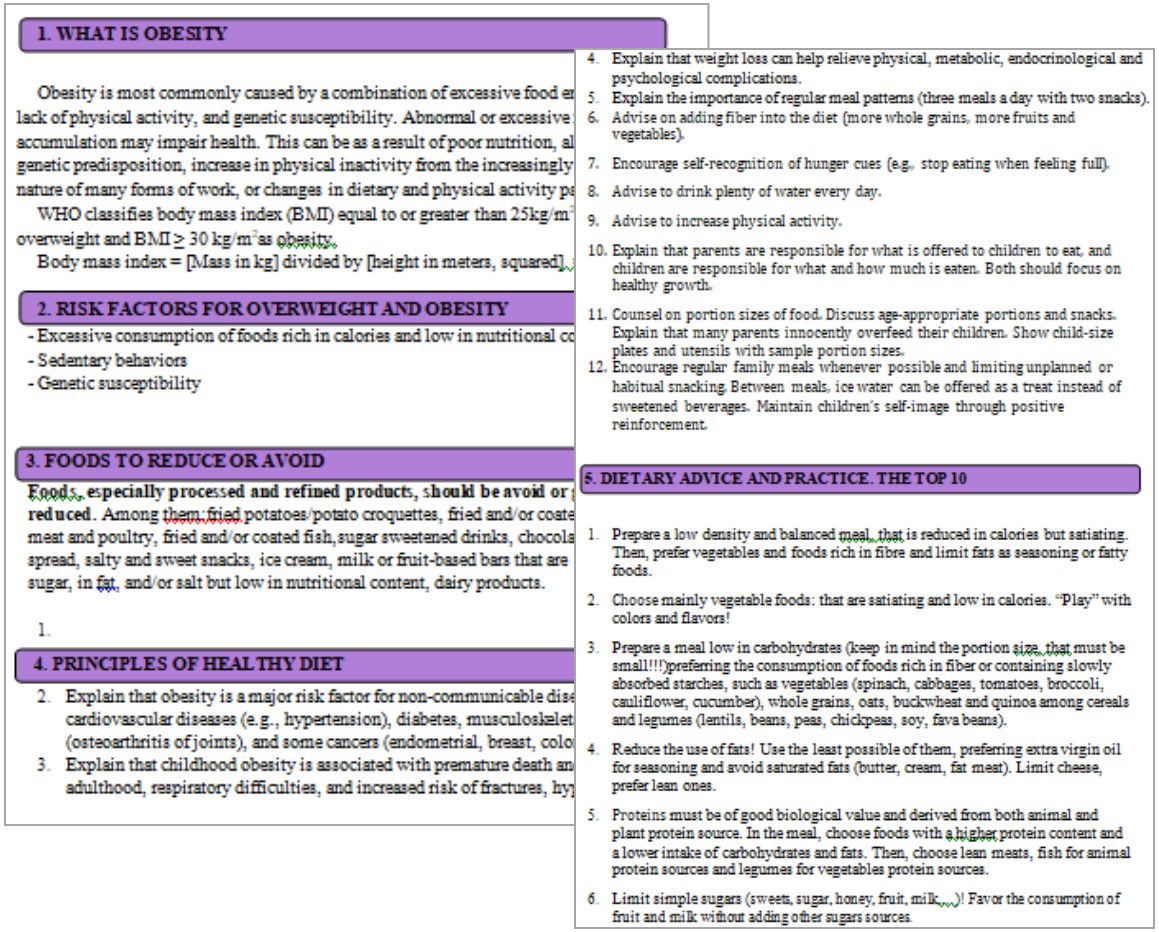
OBESITY



1. WHAT IS OBESITY

Obesity is most commonly caused by a combination of excessive food en
lack of physical activity, and genetic susceptibility. Abnormal or excessive
accumulation may impair health. This can be as a result of poor nutrition, al
genetic predisposition, increase in physical inactivity from the increasingly
nature of many forms of work, or changes in dietary and physical activity pa

WHO classifies body mass index (BMI) equal to or greater than 25kg/m^2
overweight and BMI ≥ 30 kg/m^2 as obesity.

Body mass index = [Mass in kg] divided by [height in meters, squared].

2. RISK FACTORS FOR OVERWEIGHT AND OBESITY

- Excessive consumption of foods rich in calories and low in nutritional co
- Sedentary behaviors
- Genetic susceptibility

3. FOODS TO REDUCE OR AVOID

Foods, especially processed and refined products, should be avoid or
reduced. Among them: fried potatoes/potato croquettes, fried and/or coate
meat and poultry, fried and/or coated fish, sugar sweetened drinks, chocols
spread, salty and sweet snacks, ice cream, milk or fruit-based bars that are
sugar, in fat, and/or salt but low in nutritional content, dairy products.

1.

4. PRINCIPLES OF HEALTHY DIET

2. Explain that obesity is a major risk factor for non-communicable dise
cardiovascular diseases (e.g., hypertension), diabetes, musculoskelet
(osteoarthritis of joints), and some cancers (endometrial, breast, colo
3. Explain that childhood obesity is associated with premature death an
adulthood, respiratory difficulties, and increased risk of fractures, hy
4. Explain that weight loss can help relieve physical, metabolic, endocrinological and psychological complications.
5. Explain the importance of regular meal patterns (three meals a day with two snacks).
6. Advise on adding fiber into the diet (more whole grains, more fruits and vegetables).
7. Encourage self-recognition of hunger cues (e.g., stop eating when feeling full).
8. Advise to drink plenty of water every day.
9. Advise to increase physical activity.
10. Explain that parents are responsible for what is offered to children to eat, and children are responsible for what and how much is eaten. Both should focus on healthy growth.
11. Counsel on portion sizes of food. Discuss age-appropriate portions and snacks. Explain that many parents innocently overfeed their children. Show child-size plates and utensils with sample portion sizes.
12. Encourage regular family meals whenever possible and limiting unplanned or habitual snacking. Between meals, ice water can be offered as a treat instead of sweetened beverages. Maintain children's self-image through positive reinforcement.

5. DIETARY ADVICE AND PRACTICE. THE TOP 10

1. Prepare a low density and balanced meal, that is reduced in calories but satiating. Then, prefer vegetables and foods rich in fibre and limit fats as seasoning or fatty foods.
2. Choose mainly vegetable foods: that are satiating and low in calories. "Play" with colors and flavors!
3. Prepare a meal low in carbohydrates (keep in mind the portion size, that must be small!!!)preferring the consumption of foods rich in fiber or containing slowly absorbed starches, such as vegetables (spinach, cabbages, tomatoes, broccoli, cauliflower, cucumber), whole grains, oats, buckwheat and quinoa among cereals and legumes (lentils, beans, peas, chickpeas, soy, fava beans).
4. Reduce the use of fats! Use the least possible of them, preferring extra virgin oil for seasoning and avoid saturated fats (butter, cream, fat meat). Limit cheese, prefer lean ones.
5. Proteins must be of good biological value and derived from both animal and plant protein source. In the meal, choose foods with a higher protein content and a lower intake of carbohydrates and fats. Then, choose lean meats, fish for animal protein sources and legumes for vegetables protein sources.
6. Limit simple sugars (sweets, sugar, honey, fruit, milk,...)! Favor the consumption of fruit and milk without adding other sugars sources.

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Linee guida CNR per insegnanti e studenti per creare ricette adatte ad Allergia Alimentare, Diabete, Celiachia e Obesità

FROM GUIDELINES TO RECOMMANDATIONS

CELIAC DISEASE

1. Gluten and food

Gluten is a set of reserve proteins contained in cereals prohibited from celiacs. It occurs in foods where it is contained as a viscous and elastic mass that retains the carbon dioxide molecules produced during fermentation and this allows the growth of dough volume.
The complete and permanent elimination of gluten from the diet is the only treatment, currently available to obtain the remission of symptoms and signs dependent on the disease. The Gluten-Free Diet (DSG) is based on the elimination of all foods containing cereals that contain gluten and their replacement with other foods permitted or specially formulated for celiacs.

FOOD PROHIBITED ⊗
Foods derived from cereals containing gluten are prohibited

6. Fats and condiments and miscellaneous

Butter, lard, lard.
Vegetable oils.
PDO balsamic vinegar, unflapped vinegar.
. Apple cider vinegar.
. Pepper, salt, saffron, spices, and herbs, as such.
. Tomato puree, peeled tomatoes and tomato paste not mixed with other ingre

Nuts or extracts of meat of the trade, prepared for broth.
- Chemical yeast.
- Light butter, margarine and light margarine.
- Sauces (also soy sauces), mayonnaise, mustard, ketchup, anchovy paste.

SUSPICIOUS

- Béchamel
- Sourdough or sour yeast

PROHIBITED

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Webinar di cucina sana per insegnanti

- Sviluppo di contenuti formativi, fornendo indicazioni sulle diverse patologie e linee guida per la realizzazione delle ricette in chiave salutistica.
- Le diverse informazioni scientifiche sono state utilizzate dalla scuola per integrare e creare nuovi contenuti didattici per il corso pilota.
- Il CNR ha monitorato la realizzazione dei materiali didattici prodotti per le diverse patologie al fine di garantirne la validità scientifica del corso pilota.
- Il CNR ha applicato un processo continuo di supervisione di tutte le ricette prodotte dallo chef fornendo indicazioni per ogni ricetta al fine di adattarle e trasformarle secondo i criteri individuati.
- Il CNR ha monitorato tutte le ricette e selezionato quelle che rispondono ai criteri individuati e rilasciati come linee guida dal CN

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collaboratore tecnico E.R.

Consiglio Nazionale delle Ricerche

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