SYMPOSIUM BREAD & HEALTH

GLUTEN INTRODUCTION AND THE RISK OF CELIAC DISEASES

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CONFLICT OF INTEREST DISCLOSURE

I have no conflict of interest on my presentation. All data shown reflects the current published scientific evidences.

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Celiac disease (CD) is a unique disorder in which consumption of a specific food nutrient, namely gluten, in conjunction with genetic susceptibility, is essential for the development of an insidiously evolving autoimmune reaction affecting the gut and other organs.

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CD is a permanent condition that affects approximately 1 to 3% of the general population in most parts of world except for population in which the HLA risk alleles (HLA-DQ2 and/or DQ8) are rare such as in South East Asia.

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The only treatment currently available for CD is strict adherence of a GFD for life.

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There is evidence that diagnosed but untreated CD is associated with significant increase in morbidity and mortality. Prolonged adherence to a GFD may reduce this risk for both morbidity and mortality to the levels found in the general population.

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Adherence to a GFD in children results in **remission of the intestinal lesions** and **promotes better growth** and **bone mineral density.**

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It is the task of health care professionals to monitor and advise patients about adhering to a GFD because **compliance with a GFD** is variable and may be as **low as 40%.**

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SUMMARY OF RECOMMENDATIONS

The recommendations are based on findings in children genetically predisposed to developing CD, because the risk of inducing CD through a gluten-containing diet exclusively applies to persons carrying at least 1 of the coeliac risk alleles.

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SUMMARY OF RECOMMENDATIONS

This applies to 30% to 40% of general population and 75% to 80% of those who has a parent or sibiling with CD.

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The following recommendations are conditional due to the low quality of evidence, however, applicable to all infants, although it is recognized that they may not be relevant to approximately two thirds of the population.

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Breast-feeding and CD

(1) Recommendations on BF should not be modified because of considerations regarding prevention of CD (low quality of evidence).

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Timing of Gluten Introduction

(1) Gluten can be introduced into the infant's diet between the ages of 4 and 12 completed months.

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Timing of Gluten Introduction

(2) Introducing gluten while the infant is being breast-fed cannot be recommended as a means of reducing the risk of developing CD (low quality of evidence). BF should, however, be promoted for its other well-established heath benefits.

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The age of gluten introduction in infants in this age range does not seem to influence the absolute risk of developing CDA or CD during childhood (depending on the age, quality of evidence varies from very low to high quality of evidence).

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In contrast to egg and peanut allergy, a recent systematic review found that oral tolerance was not relevant to celiac disease, suggesting that the findings may not be generalizable beyond food allergy mediated by IgE antibodies.

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Trial sequential analysis of glutens introduction and celiac disease risk found that further trials would not be futile; however, available data show no evidence of an association.

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Type of Gluten

(1) No recommendation can be made regarding the type of gluten to be used at introduction (very low quality of evidence).

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Amount of Gluten

(1) Despite the optimal amounts of gluten to be introduced at weaning or the effects of different wheat preparations on the risks of developing CD and CDA have not been established.

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Amount of Gluten

ESPGHAN suggests that consumption of large amounts of gluten should be discouraged during the first months after gluten introduction (very low quality of evidence).

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Amount of Gluten

Based on this assumption, the autors suggested:

Introduction at 6 m of age – 1,2 grams day, up to 4 weeks;

Between 7 and 8 m - 2,5 grams per day;

Between 8 and 12 m – 5 grams per day;

After 12 m – regular consumption.

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