

Type 2 diabetes the biggest threat to health in people

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Obesity is always growing and with it the people affected from type 2 diabetes. Diabetes is a problem with your body that is called hyperglycemia. Type 2 diabetes is the most common form of diabetes. If you have type 2 diabetes, the body develops an insulin resistance that prevents to keep your blood sugar at normal levels. Many results tell us that a growing number of children and young people are affected by type 2 diabetes caused by an incorrect nutrition and physical inactivity, everything that leads to a state of overweight. There is right way to prevent and cure, after a healthy way of life and devoid of free sugars, the MADIAB trial that include the Ma-Pi 2 macrobiotic diet resulted in significantly improvements in patients with type 2 diabetes.

KEY WORDS: type 2 diabetes, insulin resistance, free sugars, macrobiotic dietary intervention.

Introduction

The alimentation when is good contributes to the maintenance of the state of well being and when it is imbalanced can lead to a wide range of morbid states, first of all metabolic diseases, such as obesity, atherosclerosis, diabetes and gout^[1]. Overweight is the primary cause of type 2 diabetes. Obesity, in fact, present in about 80% of patients with type 2 diabetes^[2] and it determines an insulin resistance; therefore, the diabetic patient, to keep the blood glucose values in normal limits, must produce a higher amount of insulin more than a patient that isn't suffering; so in this way, in the diabetic is determines a high concentration of insulin in the blood called hyperinsulinism. The cause of this form of diabetes is a deficit, for the most part, of insulin secretion, associated to a resistance of peripheral tissues to insulin itself. In fact, this form of diabetes at onset usually doesn't need insulin therapy and few signs allowing an almost normal life until to the appearance of chronic complications.

All this inevitably leads to a delay of years in diagnosis. The progressive increase of the weight determines a request for production of insulin always higher that diabetic patients with a deficit, even partial, of insulin secretion can't guarantee. Accordingly, the amount of insulin present in the blood is relatively low for glycemic levels and this will determine the increase of the blood glucose values, and then the appearance of diabetes. If you have type 2 diabetes your body does not use insulin properly. This is called insulin resistance. At first, your pancreas makes extra insulin to make up for it. But, over time it isn't able to keep up and

can't make enough insulin to keep your blood glucose at normal levels. Basically obesity acts as an amplifier that unmasks and makes clinically evident the deficit of insulin secretion in diabetic patients.

Results

Type 2 diabetes in kids is such a recent phenomenon, doctors still do not have a gold-standard treatment. Fifteen years ago, this disease in children was almost unheard of. The searches from the American Diabetes Association for diabetes in youth study released data showing that type 2 diabetes in 10-to 19-year-olds had increased at 21% between 2001 and 2009. Also noted that the number of cases of type 2 rose faster among girls than in boys. The evidence suggests That type 2 behaves differently in children than in adults, an insight that may help doctors give kids with type 2 the best possible care. Children with type 2 often have risk factors for heart disease, such as high blood pressure and high cholesterol the future for adolescents with type 2 diabetes is still uncertain. The high mortality rate is directly proportional to the state of obesity, for example on average, a person of medium or low body weight has more possibilities of a long life rather than a person overweight. The rates are alarmingly higher than they were a generation ago, Obesity remains one of the biggest threats to the health of our children and our count.^[3] Table 1^[4].

Table 1. Estimated numbers of children in Europe, the USA and China with obesity-related disease indicators

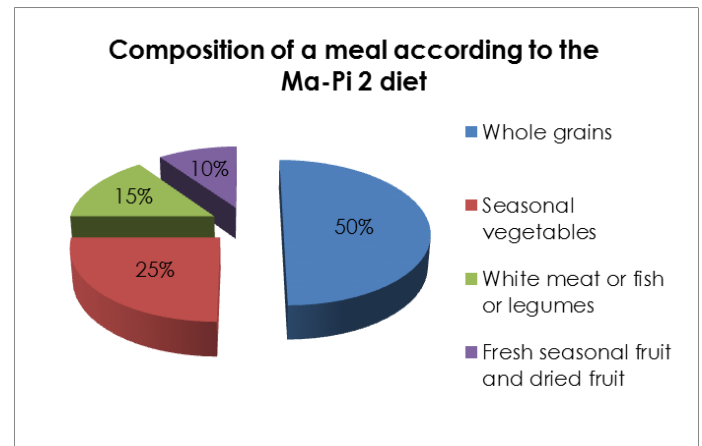
Comorbidities	Lowest estimated prevalence among obese children (%)	NHANES (1999–2008): adolescents aged 12–19 years (%)	2009 China Health and Nutrition Survey: children aged 7–17 years
	Europe	USA	China
Raised triglycerides	21.5	-	42% had at least one of the following cardiometabolic risk factors: <ul style="list-style-type: none"> • pre-diabetes/diabetes (HbA1c, 5.7%), • hypertension, • high TC, • high LDL, • low HDL, • high TG, and • high CRP
Raised total cholesterol	22.1	-	
High LDL cholesterol	18.9	22	
Low HDL cholesterol	18.7	6	
Hypertension	21.8	14	
Impaired glucose tolerance	8.4	15	
Hyperinsulinaemia	33.9	-	
Type 2 diabetes	0.5	-	
Metabolic syndrome	23.9	-	
Hepatic steatosis	27.9	-	
Elevated aminotransferase	12.8	-	

CRP: C-reactive protein; HDL: high-density lipoproteins; LDL: low-density lipoproteins; TC: total cholesterol; TG: triglycerides;

Discussion

The World Health Organization has shown that the assumption of free sugars in high amounts can cause type 2 diabetes. Body weight was selected as an outcome, in view of the extent to which comorbidities of obesity contribute to the global burden of non-communicable diseases.^[5] A solution is there that hasn't free sugars, and it is very recent. Recent study conducted by the endocrinology and diabetes operational unit of the University of Rome Bio-medical Campus has demonstrated which the MADIAB trial (a 21 day randomized, controlled trial in patients with type 2 diabetes), intervention with the Ma-Pi 2 macrobiotic diet resulted in significantly greater improvements in metabolic control compared with a standard recommended diet for patients with type 2 diabetes. The report on 6 months follow-up study, which investigated, these benefits extended beyond the 21 day intensive dietary intervention, in real-word conditions. After correcting for age and gender, the Ma-Pi 2 diet was associated with higher percentage reduction body weight and a higher percentage increase in LDL cholesterol, in all patients who participated. Both the Ma-Pi 2 and control diets maintained their benefits beyond the 21 day intensive monitored intervention over a 6 months follow-up in

real-word condition but the Ma-Pi 2 diet resulted in greater improvement in glycemic control.^[6] Diagram 1^[7].



Conclusions

The Ma-Pi 2 diet excludes saturated fats and non-natural sugars. The World Health Organization has checked the effects of free sugars intake on excessive adiposity; reducing or increasing the intake of free sugars influences the body weight in adults and children, and current evidence provides support for the existing recommendation to reduce the intake of free sugars to less than 10% of total energy intake^[5]. Believe that the feeding cure is a simple thing, and it suffices to eat less or limit your intake to one nutrient is a serious and common mistake. A malnutrition and a sedentary lifestyle lead to a low level of living, in order to avoid non-communicable diseases such as increasing type 2 diabetes, you may start with a reduction of free sugars and take into consideration one of the five Ma-Pi diets juxtaposed with daily exercise.

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^[7]Diagram built according to Mario Pianesi's instructions in "Le 5 diete Ma-Pi" published in 2009.

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