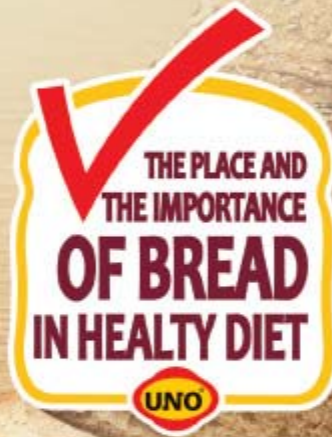




Buğdayın en iyi hali!





Buğdayın en iyi hali!

Healthy Diet = daily needed based and balanced nutrition

Healthy diet, increases modern people's quality of life style.

Cereals are too important in nutrition because of common consumption.



Buğdayın en iyi hali!

**Because 100g Cereals and
Cereals Products compensate;**

52 % of energy ,

55 % of protein,

40 % of calcium ,

35 % of iron ,

15 % of fats

66 % of carbohydrate

of your daily nutritional value.



Buğdayın en iyi hali!

For make the public to be well nourished first
we have to review “the bread” which is most important element of nutrition.

Are We Eating the healty bread?...

Buğdayın en iyi hali!



What is Healthy Bread?

Healthy Bread

that is produced, sold and stored under hygienic conditions

Healthy Bread

that is made by protecting all the goodness of wheat.

Healthy Bread

that is surrounded by vitamins and minerals as much as its beautiful taste

Buğdayın en iyi hali!



Bread As The Basic Commodity;

conclusions of wrong diet are:

- Progressive diminution of learning skills
 - Lower IQ
- Increase of infectious disease
- Lower individual work output
 - Growth retardation
 - Anemia
 - Birth defects,
- Decline of quality of life style

Buğdayın en iyi hali!

Bread As The Basic Commodity;



All the vitamins and mineral that we need are in the embryo of wheat germ and seed coat that's why the white flour does not include.

As a result of this we are facing nutritional deficiency...

Whole wheat contains fiber

Diets rich in food containing fiber reduces the risk for several chronic diseases

Buğdayın en iyi hali!

Bread As The Basic Commodity;



According to the study worked by TÜBİTAK – MAM

The profile of 360 children and young people who are between 7-17 ages from 3 regions of Turkey announced to the public, by using food consume datas, with the blood, vitamin and mineral finds which are accepted the most objective methods and also by antropometric correlation analyses.

Buğdayın en iyi hali!

Bread As The Basic Commodity;



The rate of children who has insufficient Hemoglobin and Zinc levels. (%)

	Marmara Region	Central Anatolian Region	East Anatolian Region	Mean of 3 Regions
Hemoglobin	53,3	49,2	55,4	52,7
Zinc	18,1	8,4	20,6	15,7

Buğdayın en iyi hali!

Solution Ways of Uninsufficient Nutritional Values



1. Education:

One of the most effective methods.

The process from the production to purchase for the sources of nutrient elements should be taught to the public.

To reach everyone with the education takes long time and costs more.

2. Diet Support:

It is sufficient way for short durations and individual oriented activities.

Supporters; destekleyicileri; vitamin, mineral, lees, amino acids, amino asitler, phyto chemicals, fitokimyasallar, plants and batanic products.

Buğdayın en iyi hali!

Solution Ways of Uninsufficient Nutritional Values



3. Food Enrichment:

A study to increase the nutrition values of the foods to get increased nutrition values of target groups. It is efficient for medium and long term durations. Enrichment of nutrient values is on use since 1940.

FDA legally mentioned this situation in 1980.

At the International Nutrient Conference in Rome in 1992, the importance of enrichment mentioned for decreasing insufficiency vitamin and mineral situations, and also it is spelled out that enrichment is an obligation.

Buğdayın en iyi hali!

The Basic Principles for Nutrient Enrichments



- The foods which are consumed more should be enriched.
- The nutrients which are common with insufficient nutritional values should be enriched.
 - It should stop the insufficient nutrient problems.
 - The balance of nutritional values should not be spoiled.
- Consumption should be secure, toxics should not be occurred and should be supported by scientific information.
 - The cost of enriched products should be less.
 - Shelf- life should not reduce.
 - Contribution process should be proper and practical.
- There shouldn't be lack of nutritional values by packaging, storage, distribution and consumption processes.
 - It shouldn't be misleading for consumers.
 - There should be control methods.
- Nutrient standards, regulations and the principles of nutritional values addition should be modified.



Buğdayın en iyi hali!

In 2003, a project has been developed about
“The Enrichment of Bread with Vitamin and Minerals” by
TÜBİTAK- MAM with the contribution of
Doruk Una Değer Katma Gıda Sanayi A.Ş.

With this project two different formulations has been effectuated
for kids and grown-ups. The products are enriched with
B1, B2, B6, B12 vitamins and with minerals like
niasin, folic acid, iron, calcium and zinc.

Buğdayın en iyi hali!

Enriched Bread Project



- For the project, % 68- 72 extracted wheat flour is used.
- Considering the daily intake amounts for adults and children two different formulations are developed.
- For the enrichment project; It is targeted to meet the daily intake nutritional values in 300g bread for adults and in 250g bread for children.

Buğdayın en iyi hali!



Enriched Bread Project

Vitamin-Minerals	100g bread	100g enriched bread (adult)	100g enriched bread (Age 1-18)
B ₁ vitamin (mg)	0,07	0,24	0,47
B ₂ vitamin (mg)	0,05	0,26	0,54
Folik acid (mcg)	12	60,2	50
C vitamin (mg)	0	20,2	21,20
Niasin (mg)	1,42	5,23	6,03
B ₆ vitamin (mg)	0,07	0,53	0,57
B ₁₂ vitamin (mcg)	0	0,63	0,68
Iron (mg)	2,02	4,11	4,90
Calcium (mg)	100	258	420
Zinc (mg)	0,80	4,35	4,40



Buğdayın en iyi hali!

The project is Clinically Tested and Approved!

For this purpose, these vitamins and minerals are tested in several people's blood levels such as; children, adults and people who are trying to lose weight.



Buğdayın en iyi hali!

RESEARCH PLAN

Universe
(n=78)

G1 (n=29)

GD (n=16)

Female (n=8)

Male (n=8)

GC (n=13)

Female (n=6)

Male (n=7)

G2 (n=28)

FD (n=16)

Female (n=9)

Male (n=7)

FC (n=12)

Female (n=7)

Male (n=5)

G3 (n=21)

BK (n=21)

Female (n=9)

Male (n=12)



Buğdayın en iyi hali!

G1 : Group 1

GD: Enriched bread consumers (Adults)

The group consumes at least 8 slices

GC: Non-enriched bread consumers CONTROL GROUP

G2 : Group 2.

FD: Enriched Light bread consumers (Adults)

FC: Light bread consumers CONTROL GROUP

Females in this group consumes at least 8 slices (176g) and males in this group consumes 10 slices

G3 : Group 3.

BK: Kids that consume enriched BüyümeK bread

The children in this group consumes 6 slices (138g) to 8 slices (184g)



Buğdayın en iyi hali!

For both groups before starting the research;

- The health checks are done.

For adults; besides blood tests for vitamins and minerals, systolic/diastolic blood pressure test, hemogram, blood lipids measurements (cholesterol, HDL, LDL and triglycerides), blood sugar level, urea and alkalen phospatase measurements are done.

For children only hemogram tests are done.

- A questionnaire for their socio-demographical status, nutritional habits is applied.

And with these informations given for the 1st and 3rd groups; their daily nutritional values taken with their daily diets are calculated.

- With the 2nd group that are trying to lose weight, 1500kcal and 1200kcal diets are applied for men and women respectively.

Buğdayın en iyi hali!



Results:

- Hemogram tests are normal.
- B1 vitamin levels for Group 1 and 2 have increased to normal levels even though they were at low levels before the research.
- Calcium levels are above normal levels for Group 1 and 2.
- Zinc levels have been high for Group 1 and during the research it has been higher.
- B6 vitamin, calcium and zinc levels have been above normal level at the end of the research for Group 3.
- The increases in the blood antioxidant levels have shown that these vitamins and minerals have been effecting the immune system positively

Buğdayın en iyi hali!

Comments & Suggestions



- ✓ In order to increase blood's vitamin and mineral levels; an enriched bread consumption becomes a "must" for countries like Turkey; whose main nutritional food is bread.
- ✓ Enrichment of bread is a low cost execution which will decrease illnesses, the health costs and will benefit the country economically.

Buğdayın en iyi hali!



Comments & Suggestions

- ✓ Observing the daily status, Turkey's facilities for mandatory enrichment projects are not sufficient. For these reasons facultative enrichment projects should get started and should be widespread.
- ✓ For consumers there must be educations and trainings in order to grasp the importance of this project.



Buğdayın en iyi hali!

The goal is Turkey on a healthier diet.

Thank you...