

# BAŐLİCA GİDALARIN KİMYASAL BİLEŐİMİ

- Dersin bu bölümünde sınırlı sayıda, ancak temel gıda maddesi olma niteliğindeki başlıca gıdalar seçilerek genel bileşimi bir örnek oluşturmak üzere verilmiştir.
- Veriler; günümüzde bu konuda en güvenilir kaynak olan ABD Tarım Bakanlığı sitesinin (*Agricultural Research Service United States Department of Agriculture*) aşağıda verilen ve yaşamınızda size her zaman gerekebilecek olan web adresinden alınmıştır.

Bu adresten binlerce gıdanın kimyasal bileşimine ulaşılabilir:

- <http://ndb.nal.usda.gov/ndb/foods/>

**Not:** Tablolar İngilizce hazırlık eğitimi almış bir Gıda Mühendisinin anlaması gereken düzeyde ve bir bölümü dilimizde de kullanılan **İngilizce sözcükler içermektedir**. Bilmediğiniz kelimeler olursa derste sorunuz.

- EKMEK**

<b>EKMEK</b>	<b>UNIT</b>	<b>Value per 100 g</b>
Water	g	35.20
Energy	kcal	267,0
Protein	g	10,7
Total lipid (fat)	g	3,2
Carbohydrate, by difference	g	48.68
Fiber, total dietary	g	4.0
Sugars, total	g	5,9
<b>Minerals</b>		
Calcium, Ca	mg	133,0
Iron, Fe	mg	3,5
Magnesium, Mg	mg	45,0
Phosphorus, P	mg	149,0
Potassium, K	mg	177,0
Sodium, Na	mg	508,0
Zinc, Zn	mg	1,2
<b>Vitamins</b>		
Vitamin C, total ascorbic acid	mg	0.2
Thiamin	mg	0.415
Riboflavin	mg	0.253
Niacin	mg	5,6
Vitamin B-6	mg	0.111
Folate, DFE	µg	99,0
Vitamin B-12	µg	0.00
Vitamin A, RAE	µg	0,0
Vitamin A, IU	IU	2,0
Vitamin E (alpha-tocopherol)	mg	0.19
Vitamin D (D2 + D3)	µg	0.0
Vitamin D	IU	0,0
Vitamin K (phylloquinone)	µg	4,9
<b>Lipids</b>		
Fatty acids, total saturated	g	0.777
Fatty acids, total monounsaturated	g	0.607
Fatty acids, total polyunsaturated	g	1,5

# • PİRİNÇ

PİRİNÇ	Unit	Value per 100 g
Water	g	12,9
Energy	kcal	360,0
Protein	g	6,6
Total lipid (fat)	g	0.58
Carbohydrate, by g	g	79.34
Minerals		
Calcium, Ca	mg	9,0
Iron, Fe	mg	0.80
Magnesium, Mg	mg	35,0
Phosphorus, P	mg	108,0
Potassium, K	mg	86,0
Sodium, Na	mg	1,0
Zinc, Zn	mg	1,2
Vitamins		
Vitamin C, total a	mg	0.0
Thiamin	mg	0.070
Riboflavin	mg	0.048
Niacin	mg	1,6
Vitamin B-6	mg	0.145
Folate, DFE	µg	9,0
Vitamin B-12	µg	0.00
Vitamin D (D2 + D3)	µg	0.0
Vitamin D	IU	0,0
Lipids		
Fatty acids, total	g	0.158
Fatty acids, total	g	0.181
Fatty acids, total	g	0.155

# • YUMURTA

YUMURTA	UNIT	VALUE PER 100 g
Water	g	76.15
Energy	kcal	143
Protein	g	12,56
Total lipid (fat)	g	9,51
Carbohydrate, by difference	g	0.72
Fiber, total dietary	g	0.0
Sugars, total	g	0.37
Minerals		
Calcium, Ca	mg	56
Iron, Fe	mg	1,75
Magnesium, Mg	mg	12
Phosphorus, P	mg	198
Potassium, K	mg	138
Sodium, Na	mg	142
Zinc, Zn	mg	1,29
Vitamins		
Vitamin C, total ascorbic acid	mg	0.0
Thiamin	mg	0.040
Riboflavin	mg	0.457
Niacin	mg	0.075
Vitamin B-6	mg	0.170
Folate, DFE	µg	47
Vitamin B-12	µg	0.89
Vitamin A, RAE	µg	160
Vitamin A, IU	IU	540
Vitamin E (alpha-tocopherol)	mg	1,05
Vitamin D (D2 + D3)	µg	2.0
Vitamin D	IU	82
Vitamin K (phylloquinone)	µg	0.3
Lipids		
Fatty acids, total saturated	g	3,126
Fatty acids, total monounsaturated	g	3,658
Fatty acids, total polyunsaturated	g	1,911
Cholesterol	mg	372

- DANA KIYMA**

<b>DANA KIYMA</b>	Unit	Value per 100 g
Water	g	66.16
Energy	kcal	197,0
Protein	g	18.58
Total lipid (fat)	g	13,1
Carbohydrate, by difference	g	0.00
Fiber, total dietary	g	0.0
Sugars, total	g	0.00
<b>Minerals</b>		
Calcium, Ca	mg	12,0
Iron, Fe	mg	1,4
Magnesium, Mg	mg	31,0
Phosphorus, P	mg	197,0
Potassium, K	mg	198,0
Sodium, Na	mg	103,0
Zinc, Zn	mg	2,5
<b>Vitamins</b>		
Vitamin C, total ascorb.a.	mg	0.0
Thiamin	mg	0.113
Riboflavin	mg	0.280
Niacin	mg	5,5
Vitamin B-6	mg	0.446
Folate, DFE	µg	3,0
Vitamin B-12	µg	2,3
Vitamin A, RAE	µg	0,0
Vitamin A, IU	IU	0,0
Vitamin E (alpha-tocopherol)	mg	0.49
Vitamin D (D2 + D3)	µg	1,3
Vitamin D	IU	51,0
Vitamin K (phylloquinone)	µg	1,4
<b>Lipids</b>		
Fatty acids, total saturated	g	5,1
Fatty acids, total monounsaturated	g	6,1
Fatty acids, total polyunsaturated	g	0.732
Cholesterol	mg	49,0

- **TAVUK ETİ (beyaz et)**

<b>TAVUK ETİ (Beyaz et)</b>		
Nutrient	Unit	Value per 100 g
<b>Proximates</b>		
Water	g	74.30
Energy	kcal	109,0
Protein	g	22.20
Total lipid (fat)	g	1,6
Carbohydrate, by difference	g	0.00
Fiber, total dietary	g	0.0
Sugars, total	g	0.00
<b>Minerals</b>		
Calcium, Ca	mg	11,0
Iron, Fe	mg	0.89
Magnesium, Mg	mg	25,0
Phosphorus, P	mg	223,0
Potassium, K	mg	252,0
Sodium, Na	mg	51,0
Zinc, Zn	mg	0.66
<b>Vitamins</b>		
Vitamin C, total ascorbic acid	mg	0.0
Thiamin	mg	0.066
Riboflavin	mg	0.089
Niacin	mg	10,2
Vitamin B-6	mg	0.550
Folate, DFE	µg	4,0
Vitamin B-12	µg	0.39
Vitamin A, RAE	µg	8,0
Vitamin A, IU	IU	27,0
Vitamin E (alpha-tocopherol)	mg	0.22
Vitamin K (phylloquinone)	µg	2,4
<b>Lipids</b>		
Fatty acids, total saturated	g	0.370
Fatty acids, total monounsaturated	g	0.480
Fatty acids, total polyunsaturated	g	0.400
Cholesterol	mg	57,0

# • LEVREK BALIĞI

LEVREK BALIĞI		
Nutrient	Unit	Value per 100 g
Proximates		
Water	g	79.22
Energy	kcal	97,0
Protein	g	17.73
Total lipid (fat)	g	2,3
Carbohydrate, by difference	g	0.00
Fiber, total dietary	g	0.0
Minerals		
Calcium, Ca	mg	15,0
Iron, Fe	mg	0.84
Magnesium, Mg	mg	40,0
Phosphorus, P	mg	198,0
Potassium, K	mg	256,0
Sodium, Na	mg	69,0
Zinc, Zn	mg	0.40
Vitamins		
Vitamin C, total ascorbic acid	mg	0.0
Thiamin	mg	0.100
Riboflavin	mg	0.030
Niacin	mg	2,1
Vitamin B-6	mg	0.300
Folate, DFE	µg	9,0
Vitamin B-12	µg	3,8
Vitamin A, RAE	µg	27,0
Vitamin A, IU	IU	90,0
Lipids		
Fatty acids, total saturated	g	0.507
Fatty acids, total monounsaturated	g	0.660
Fatty acids, total polyunsaturated	g	0.784
Cholesterol	mg	80,0

- BAL**

<b>BAL</b>		
Nutrient	Unit	e per 100 g
<b>Proximates</b>		
Water	g	17,1
Energy	kcal	304,0
Protein	g	0.30
Total lipid (fat)	g	0.00
Carbohydrate, by difference	g	82.40
Fiber, total dietary	g	0.2
Sugars, total	g	82.12
<b>Minerals</b>		
Calcium, Ca	mg	6,0
Iron, Fe	mg	0.42
Magnesium, Mg	mg	2,0
Phosphorus, P	mg	4,0
Potassium, K	mg	52,0
Sodium, Na	mg	4,0
Zinc, Zn	mg	0.22
<b>Vitamins</b>		
Vitamin C, total ascorbic acid	mg	0.5
Thiamin	mg	0.000
Riboflavin	mg	0.038
Niacin	mg	0.121
Vitamin B-6	mg	0.024
Folate, DFE	µg	2,0
Vitamin B-12	µg	0.00
Vitamin A, RAE	µg	0,0
Vitamin A, IU	IU	0,0
Vitamin E (alpha-tocopherol)	mg	0.00
Vitamin D (D2 + D3)	µg	0.0
Vitamin D	IU	0,0
Vitamin K (phylloquinone)	µg	0.0
<b>Lipids</b>		
Fatty acids, total saturated	g	0.000
Fatty acids, total monounsaturated	g	0.000
Fatty acids, total polyunsaturated	g	0.000



# • SÜT

<b>SÜT</b>		
Nutrient	Unit	Value per 100 g
<b>Proximates</b>		
Water	g	88.13
Energy	kcal	61,0
Protein	g	3,2
Total lipid (fat)	g	3,3
Carbohydrate, by difference	g	4,8
Fiber, total dietary	g	0.0
Sugars, total	g	5,1
<b>Minerals</b>		
Calcium, Ca	mg	113,0
Iron, Fe	mg	0.03
Magnesium, Mg	mg	10,0
Phosphorus, P	mg	84,0
Potassium, K	mg	132,0
Sodium, Na	mg	43,0
Zinc, Zn	mg	0.37
<b>Vitamins</b>		
Vitamin C, total ascorbic acid	mg	0.0
Thiamin	mg	0.046
Riboflavin	mg	0.169
Niacin	mg	0.089
Vitamin B-6	mg	0.036
Folate, DFE	µg	5,0
Vitamin B-12	µg	0.45
Vitamin A, RAE	µg	46,0
Vitamin A, IU	IU	162,0
Vitamin E (alpha-tocopherol)	mg	0.07
Vitamin D (D2 + D3)	µg	0.1
Vitamin D	IU	2,0
Vitamin K (phylloquinone)	µg	0.3
<b>Lipids</b>		
Fatty acids, total saturated	g	1,9
Fatty acids, total monounsaturated	g	0.812
Fatty acids, total polyunsaturated	g	0.195
Cholesterol	mg	10,0

# BEYAZ PEYNİR

BEYAZ PEYNİR	Unit	Value per 100 g
Proximates		
Water	g	55.22
Energy	kcal	264
Protein	g	14.21
Total lipid (fat)	g	21.28
Carbohydrate, by difference	g	4,09
Fiber, total dietary	g	0.0
Sugars, total	g	4,09
Minerals		
Calcium, Ca	mg	493
Iron, Fe	mg	0.65
Magnesium, Mg	mg	19
Phosphorus, P	mg	337
Potassium, K	mg	62
Sodium, Na	mg	917
Zinc, Zn	mg	2,88
Vitamins		
Vitamin C, total ascorbic acid	mg	0.0
Thiamin	mg	0.154
Riboflavin	mg	0.844
Niacin	mg	0.991
Vitamin B-6	mg	0.424
Folate, DFE	µg	32
Vitamin B-12	µg	1,69
Vitamin A, RAE	µg	125
Vitamin A, IU	IU	422
Vitamin E (alpha-tocopherol)	mg	0.18
Vitamin D (D2 + D3)	µg	0.4
Vitamin D	IU	16
Vitamin K (phylloquinone)	µg	1,8
Lipids		
Fatty acids, total saturated	g	4,62
Fatty acids, total monounsatur	g	0,591
Fatty acids, total polyunsaturat	g	0.591
Cholesterol	mg	89

# • ÇAY

ÇAY (Poşet)	Unit	Value per 100 g
Water	g	5,1
Energy	kcal	315,0
Protein	g	20.21
Total lipid (fat)	g	0.00
Carbohydrate, by di	g	58.66
Fiber, total dietary	g	8,5
Sugars, total	g	5,5
Minerals		
Calcium, Ca	mg	118,0
Iron, Fe	mg	2,3
Magnesium, Mg	mg	272,0
Phosphorus, P	mg	239,0
Potassium, K	mg	6040,0
Sodium, Na	mg	72,0
Zinc, Zn	mg	1,7
Vitamins		
Vitamin C, total asc	mg	0.0
Thiamin	mg	0.000
Riboflavin	mg	0.985
Niacin	mg	10,8
Vitamin B-6	mg	0.356
Folate, DFE	µg	103,0
Vitamin B-12	µg	0.00
Vitamin A, RAE	µg	0,0
Vitamin A, IU	IU	0,0
Vitamin E (alpha-to	mg	0.00
Vitamin D (D2 + D3)	µg	0.0
Vitamin D	IU	0,0
Vitamin K (phylloqui	µg	0.0
Lipids		
Fatty acids, total sa	g	0.000
Fatty acids, total mo	g	0.000
Fatty acids, total po	g	0.000
Cholesterol	mg	0,0
Other		
Caffeine	mg	5714,0

# • ZEYTİNYAĞI

ZEYTİNYAĞI	Unit	Value per 100 g
Water	g	0.00
Energy	kcal	884,0
Protein	g	0.00
Total lipid (fat)	g	100.00
Carbohydrate, by dif	g	0.00
Fiber, total dietary	g	0.0
Sugars, total	g	0.00
Minerals		
Calcium, Ca	mg	1,0
Iron, Fe	mg	0.56
Magnesium, Mg	mg	0,0
Phosphorus, P	mg	0,0
Potassium, K	mg	1,0
Sodium, Na	mg	2,0
Zinc, Zn	mg	0.00
Vitamins		
Vitamin C, total ascc	mg	0.0
Thiamin	mg	0.000
Riboflavin	mg	0.000
Niacin	mg	0.000
Vitamin B-6	mg	0.000
Folate, DFE	µg	0,0
Vitamin B-12	µg	0.00
Vitamin A, RAE	µg	0,0
Vitamin A, IU	IU	0,0
Vitamin E (alpha-toc	mg	14.35
Vitamin D (D2 + D3)	µg	0.0
Vitamin D	IU	0,0
Vitamin K (phylloquir	µg	60.2
Lipids		
Fatty acids, total sat	g	13,8
Fatty acids, total mo	g	73,0
Fatty acids, total pol	g	10,5
Cholesterol	mg	0,0

# • PATATES

<b>PATATES, taze</b>	Unit	per 100 g
Water	g	79.34
Energy	kcal	77,0
Protein	g	2,0
Total lipid (fat)	g	0.09
Carbohydrate, by difference	g	17.47
Fiber, total dietary	g	2,2
Sugars, total	g	0.78
<b>Minerals</b>		
Calcium, Ca	mg	12,0
Iron, Fe	mg	0.78
Magnesium, Mg	mg	23,0
Phosphorus, P	mg	57,0
Potassium, K	mg	421,0
Sodium, Na	mg	6,0
Zinc, Zn	mg	0.29
<b>Vitamins</b>		
Vitamin C, total ascorbic acid	mg	19,7
Thiamin	mg	0.080
Riboflavin	mg	0.032
Niacin	mg	1,1
Vitamin B-6	mg	0.295
Folate, DFE	µg	16,0
Vitamin B-12	µg	0.00
Vitamin A, RAE	µg	0,0
Vitamin A, IU	IU	2,0
Vitamin E (alpha-tocopherol)	mg	0.01
Vitamin D (D2 + D3)	µg	0.0
Vitamin D	IU	0,0
Vitamin K (phylloquinone)	µg	1,9
<b>Lipids</b>		
Fatty acids, total saturated	g	0.026
Fatty acids, total monounsaturated	g	0.002
Fatty acids, total polyunsaturated	g	0.043

# • DOMATES

<b>DOMATES</b>	Unit	Value per 100 g
Water	g	94.52
Energy	kcal	18,0
Protein	g	0.88
Total lipid (fat)	g	0.20
Carbohydrate, by difference	g	3,9
Fiber, total dietary	g	1,2
Sugars, total	g	2,6
<b>Minerals</b>		
Calcium, Ca	mg	10,0
Iron, Fe	mg	0.27
Magnesium, Mg	mg	11,0
Phosphorus, P	mg	24,0
Potassium, K	mg	237,0
Sodium, Na	mg	5,0
Zinc, Zn	mg	0.17
<b>Vitamins</b>		
Vitamin C, total ascorbic acid	mg	13,7
Thiamin	mg	0.037
Riboflavin	mg	0.019
Niacin	mg	0.594
Vitamin B-6	mg	0.080
Folate, DFE	µg	15,0
Vitamin B-12	µg	0.00
Vitamin A, RAE	µg	42,0
Vitamin A, IU	IU	833,0
Vitamin E (alpha-tocopherol)	mg	0.54
Vitamin D (D2 + D3)	µg	0.0
Vitamin D	IU	0,0
Vitamin K (phylloquinone)	µg	7,9
<b>Lipids</b>		
Fatty acids, total saturated	g	0.028
Fatty acids, total monounsaturated	g	0.031
Fatty acids, total polyunsaturated	g	0.083

- **ELMA**

<b>ELMA</b>	Unit	Value per 100 g
Water	g	85.56
Energy	kcal	52,0
Protein	g	0.26
Total lipid (fat)	g	0.17
Carbohydrate, by difference	g	13.81
Fiber, total dietary	g	2,4
Sugars, total	g	10,4
<b>Minerals</b>		
Calcium, Ca	mg	6,0
Iron, Fe	mg	0.12
Magnesium, Mg	mg	5,0
Phosphorus, P	mg	11,0
Potassium, K	mg	107,0
Sodium, Na	mg	1,0
Zinc, Zn	mg	0.04
<b>Vitamins</b>		
Vitamin C, total ascorbic acid	mg	4,6
Thiamin	mg	0.017
Riboflavin	mg	0.026
Niacin	mg	0.091
Vitamin B-6	mg	0.041
Folate, DFE	µg	3,0
Vitamin B-12	µg	0.00
Vitamin A, RAE	µg	3,0
Vitamin A, IU	IU	54,0
Vitamin E (alpha-tocopherol)	mg	0.18
Vitamin D (D2 + D3)	µg	0.0
Vitamin D	IU	0,0
Vitamin K (phylloquinone)	µg	2,2
<b>Lipids</b>		
Fatty acids, total saturated	g	0.028
Fatty acids, total monounsaturated	g	0.007
Fatty acids, total polyunsaturated	g	0.051

- **ŞARAP**

<b>ŞARAP (kırmızı, Merlot)</b>	Unit	Value per 100 g
Water	g	86.59
Energy	kcal	83
Protein	g	0.07
Total lipid (fat)	g	0.00
Carbohydrate, by difference	g	18660
Fiber, total dietary	g	0.0
Sugars, total	g	0.62
<b>Minerals</b>		
Calcium, Ca	mg	8
Iron, Fe	mg	0.46
Magnesium, Mg	mg	12
Phosphorus, P	mg	23
Potassium, K	mg	127
Sodium, Na	mg	4
Zinc, Zn	mg	0.14
<b>Vitamins</b>		
Vitamin C, total ascorbic aci	mg	0.0
Thiamin	mg	0.005
Riboflavin	mg	0.031
Niacin	mg	0.224
Vitamin B-6	mg	0.057
Vitamin B-12	µg	0.00



# • BİRA

<b>BİRA</b>	<b>Unit</b>	<b>Value per 100 g</b>
Water	g	91.96
Energy	kcal	43
Protein	g	0.46
Total lipid (fat)	g	0.00
Carbohydrate, by difference	g	3,55
Fiber, total dietary	g	0.0
Sugars, total	g	0.00
<b>Minerals</b>		
Calcium, Ca	mg	4
Iron, Fe	mg	0.02
Magnesium, Mg	mg	6
Phosphorus, P	mg	14
Potassium, K	mg	27
Sodium, Na	mg	4
Zinc, Zn	mg	0.01
<b>Vitamins</b>		
Vitamin C, total ascorbic acid	mg	0.0
Thiamin	mg	0.005
Riboflavin	mg	0.025
Niacin	mg	0.513
Vitamin B-6	mg	0.046
Folate, DFE	µg	6
Vitamin B-12	µg	0.02
Vitamin A, RAE	µg	0
Vitamin A, IU	IU	0
Vitamin E (alpha-tocopherol)	mg	0.00
Vitamin D (D2 + D3)	µg	0.0
Vitamin D	IU	0
Vitamin K (phylloquinone)	µg	0.0

## Dünyada en çok üretilen 20 bitki

SIRA NO	ÜRÜNLER	ÜRETİM (milyon ton)
1	Şeker kamışı	1833
2	Mısır	873
3	Çeltik	738
4	Buğday	671
5	Patates	365
6	Şeker pancarı	270
7	Cassava	263
8	Soya	242
9	Domates	162
10	Arpa	134
11	Karpuz	105
12	Muz	102
13	Kuru soğan	82
14	Elma	76
15	Lahana	70
16	Portakal	68
17	Üzüm	67
18	Hıyar	65
19	Kolza	65
20	Patlıcan	48

## Ülkemizde en çok üretilen 20 bitki

SIRA NO	ÜRÜNLER	ÜRETİM (bin ton)
1	Buğday	20.100
2	Şeker pancarı	15.000
3	Domates	11.350
4	Arpa	7.100
5	Patates	4.822
6	Mısır	4.600
7	Üzüm	4.276
8	Karpuz	4.044
9	Elma	2.889
10	Biber	2.072
11	Zeytin	1.820
12	Kuru soğan	1.819
13	Hıyar	1.742
14	Kavun	1.708
15	Portakal	1.662
16	Ayçiçeği	1.370
17	Mandarin	889
18	Çeltik	880
19	Pamuk	851
20	Patlıcan	799

## Türkiye'de üretilen hayvansal ürünler

ÜRÜNLER	ÜRETİM (bin ton) (yumurtada adet)
Kırmızı et	996
Piliç eti	1.400
Süt	18.000
Balık	562 (%38'i kültür b.)
Yumurta	16 milyar



Cassava



Burçak tohumu

### Ülkemizin dünya üretiminde:

1. olduğu bitkiler: Fındık, kayısı, ayva, incir, kiraz
2. olduğu bitkiler: Karpuz, kavun, hıyar
3. olduğu bitkiler: Elma, kestane, çilek, Antepfıstığı, biber, nohut
4. olduğu bitkiler: Ceviz, zeytin, mandarin, domates, ıspanak, taze fasulye, mercimek, burçak, haşhaş
5. olduğu bitkiler: Armut, erik, çay, patlıcan

## GIDALARIN BİLEŞİMİNİN BİLİNME GEREKLİLİĞİ OLAN DURUMLAR

<b>Genel Diyet Kontrol Gerekliliği</b>	
Diyabet	Enerji değeri, karbonhidrat, yağ, protein, diyet lif
Obezite	Enerji değeri, yağ
Hipertansiyon	Enerji değeri, sodyum, potasyum, protein
Böbrek hastalıkları	Protein, sodyum, potasyum
<b>Eksiklikler</b>	
Anemi	Demir, folat, vitamin B12
Vitamin eksiklikleri	Spesifik vitamin içerikleri
<b>Metabolizma bozuklukları</b>	
Hemokromatozis	Demir
Hiperlipidemi	Yağ, yağ asitleri, kolesterol
Amino asit metabolizmalarının doğumsal bozuklukları	Amino asitler
Gut, ksantinüre	Pürinler
İdrar kesesi hastalığı	Yağ, kalsiyum, kolesterol, diyet lif
Wilson hastalığı	Bakır
<b>Intoleranslar</b>	
Disakkaritler, monosakkaritler	Şekerler; özellikle sukroz, laktoz, früktoz, galaktoz
Gluten (vd. spesifik proteinler)	Gluten, bazı spesifik proteinler
Migren	Monoaminler
Allerjiler	Spesifik proteinler