

Besin Alerjilerinde Tanı

Dr. Funda ÖZGENÇ

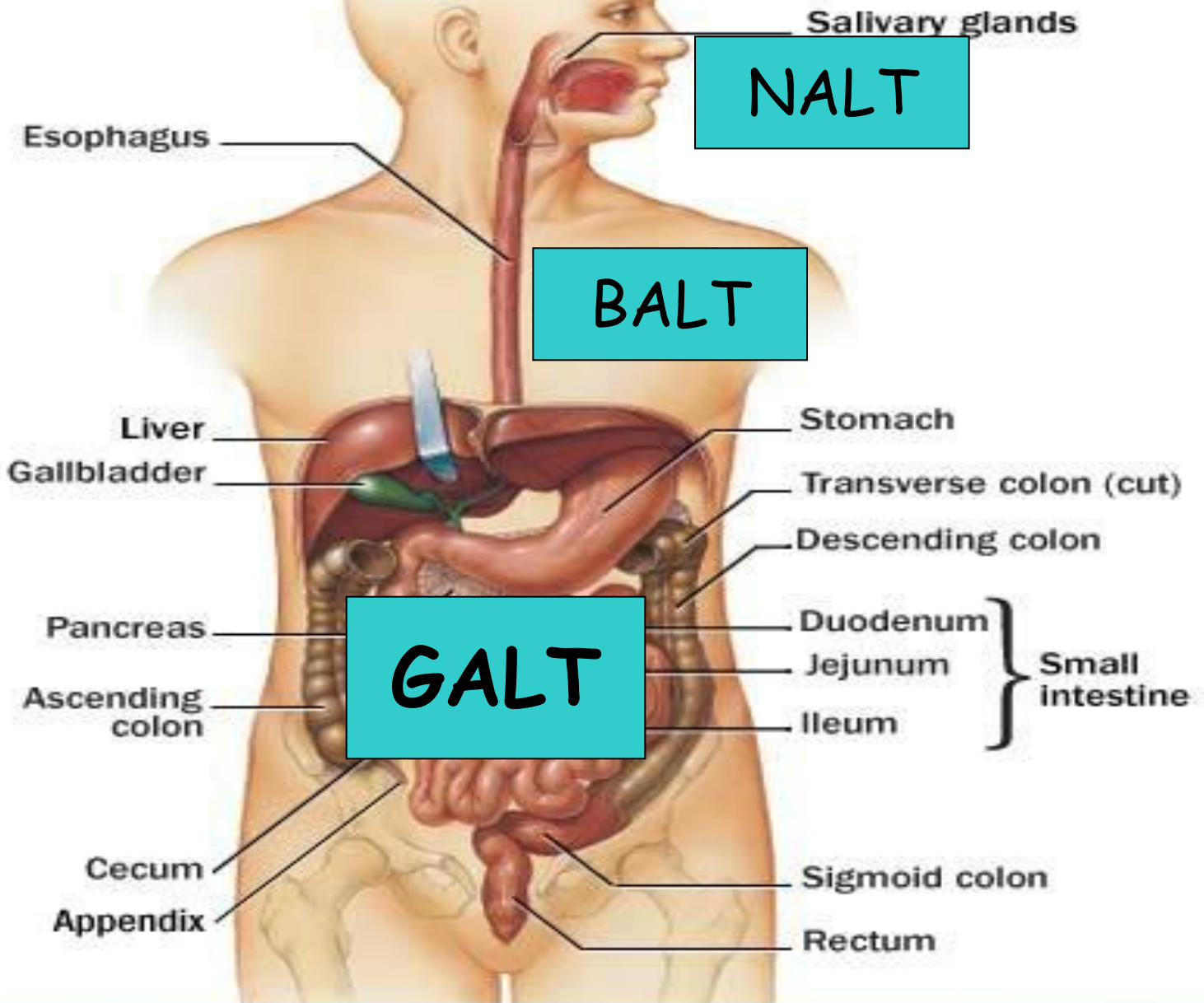


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“The fundamental activity of medical science is to determine the ultimate causation of disease.”

Trotter, Lancet 1933





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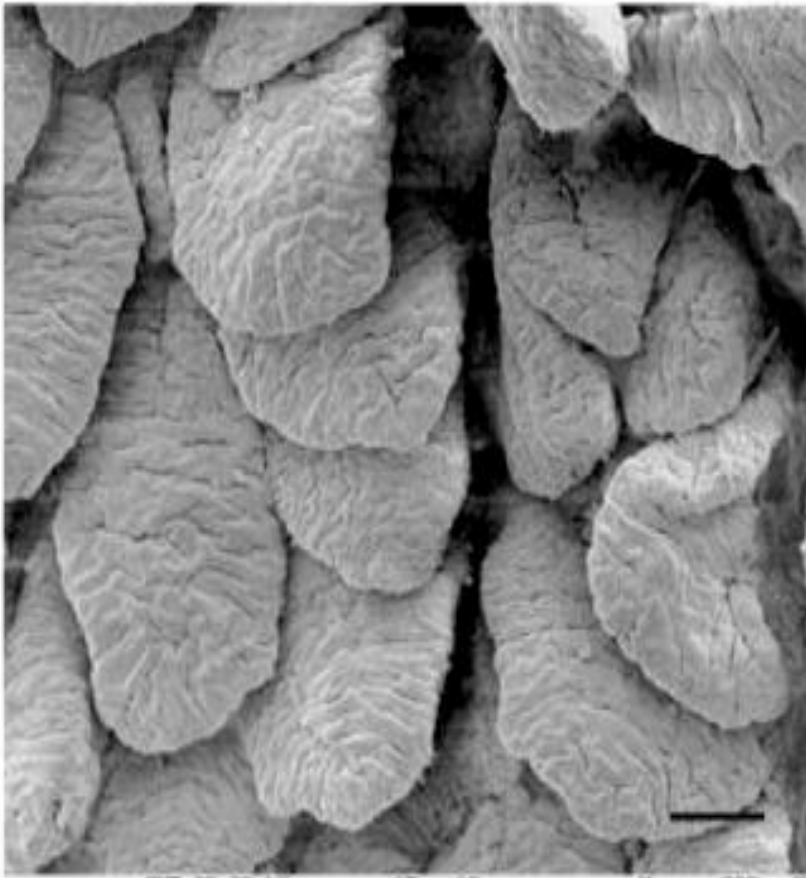
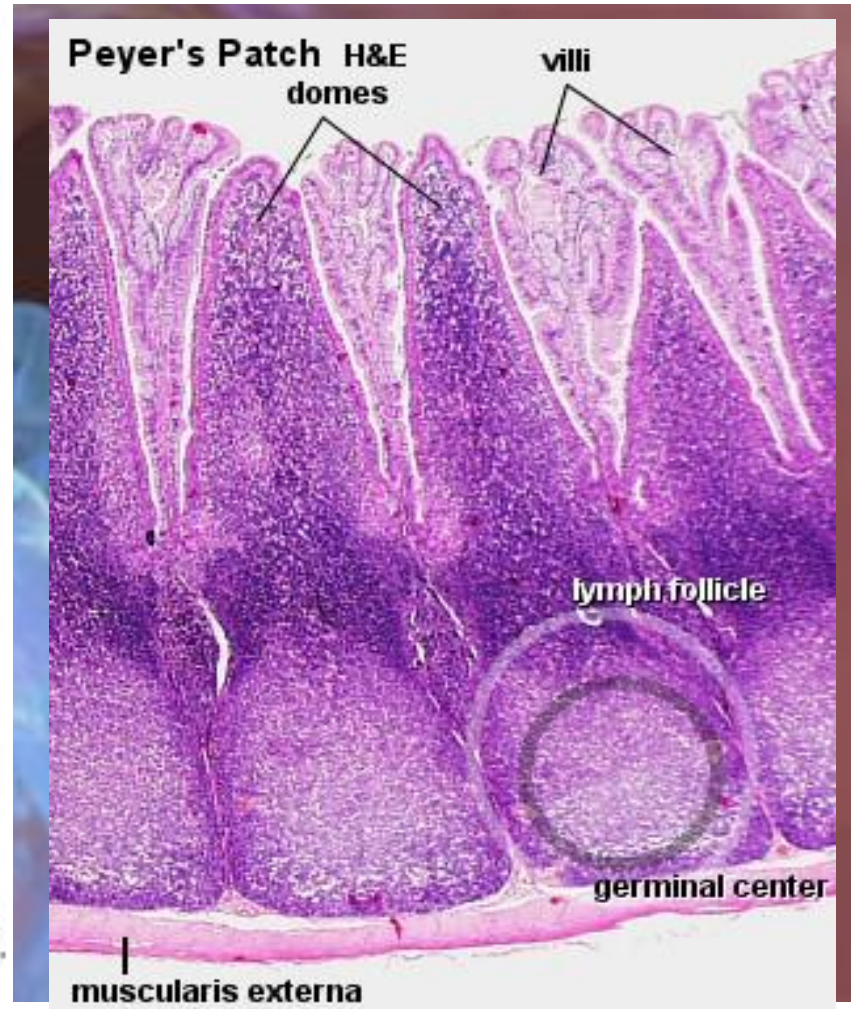


Figura 7 - Vilosidades do ileo de bezerro. Barra = 100 μ m.
Figure 7 - Ileal villi of a neonatal calf. Bar = 100 μ m.



Immunological Battlefield of Mucosal Surfaces

Surface Area

400 m²

GIS →

*Patojen

*Kommensal

*Diyet antijenleri



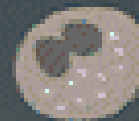
AYIRT EDER

Food
Antigens

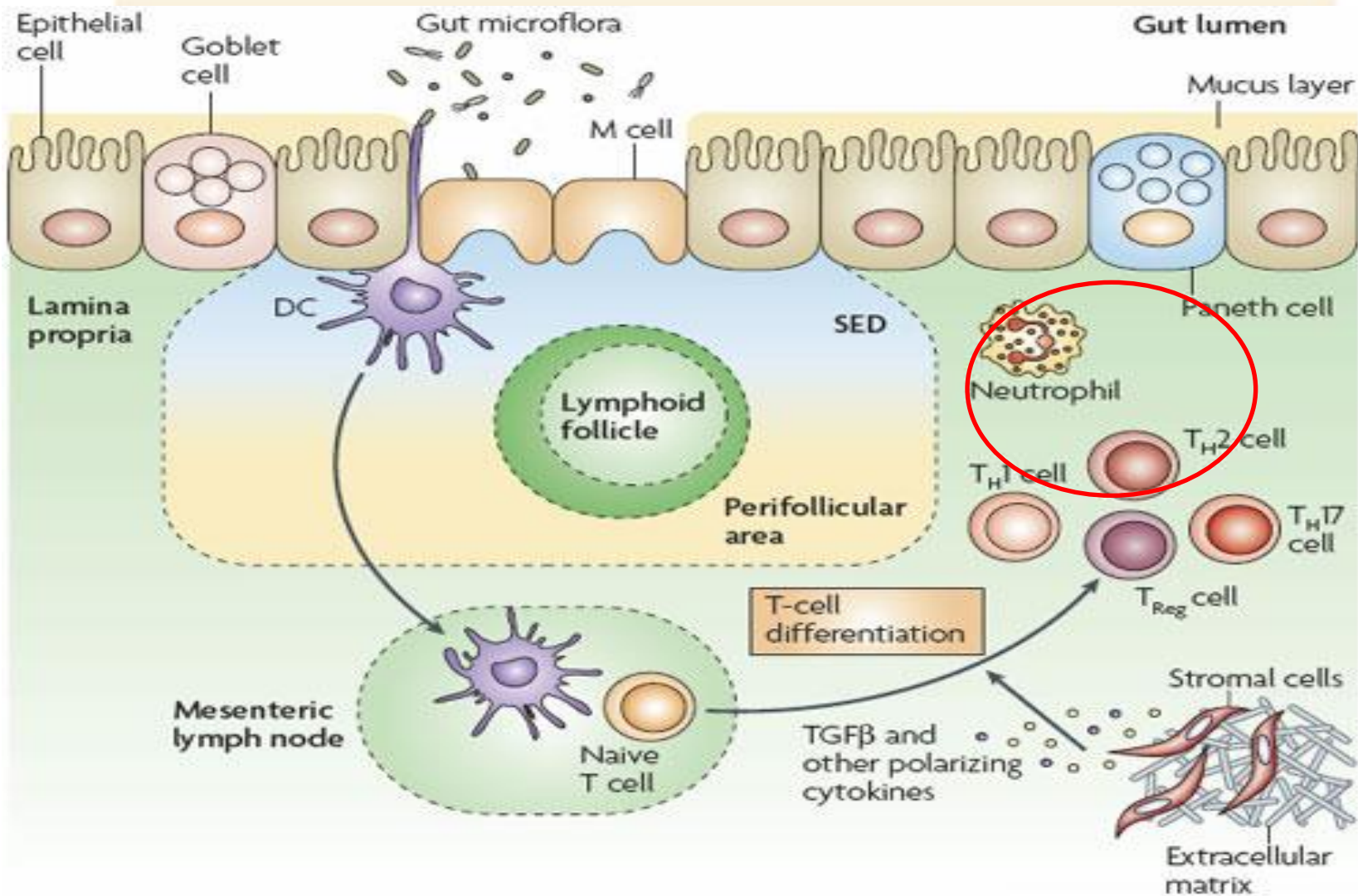
Shedding 10¹¹ cells/day



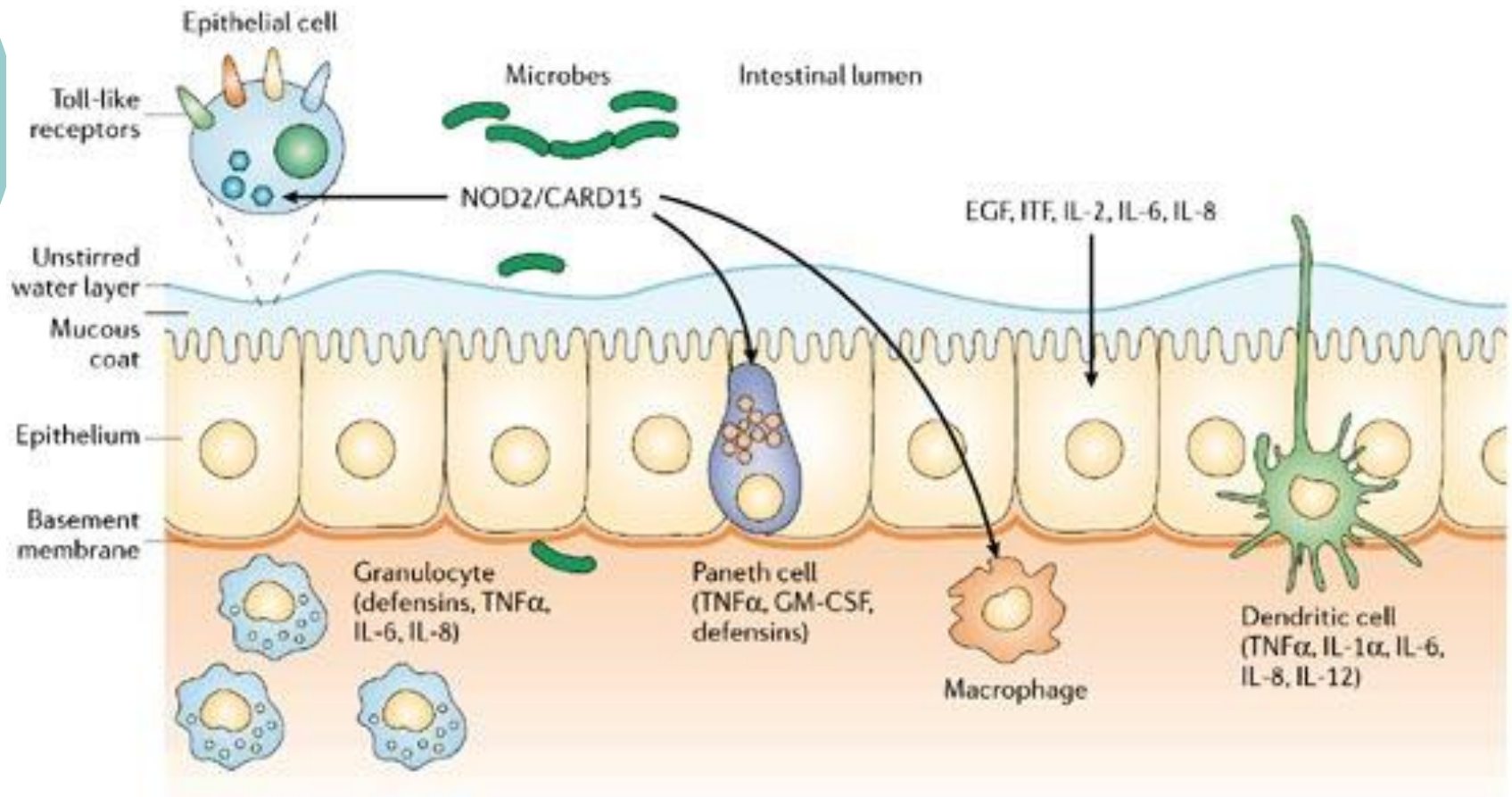
PMN



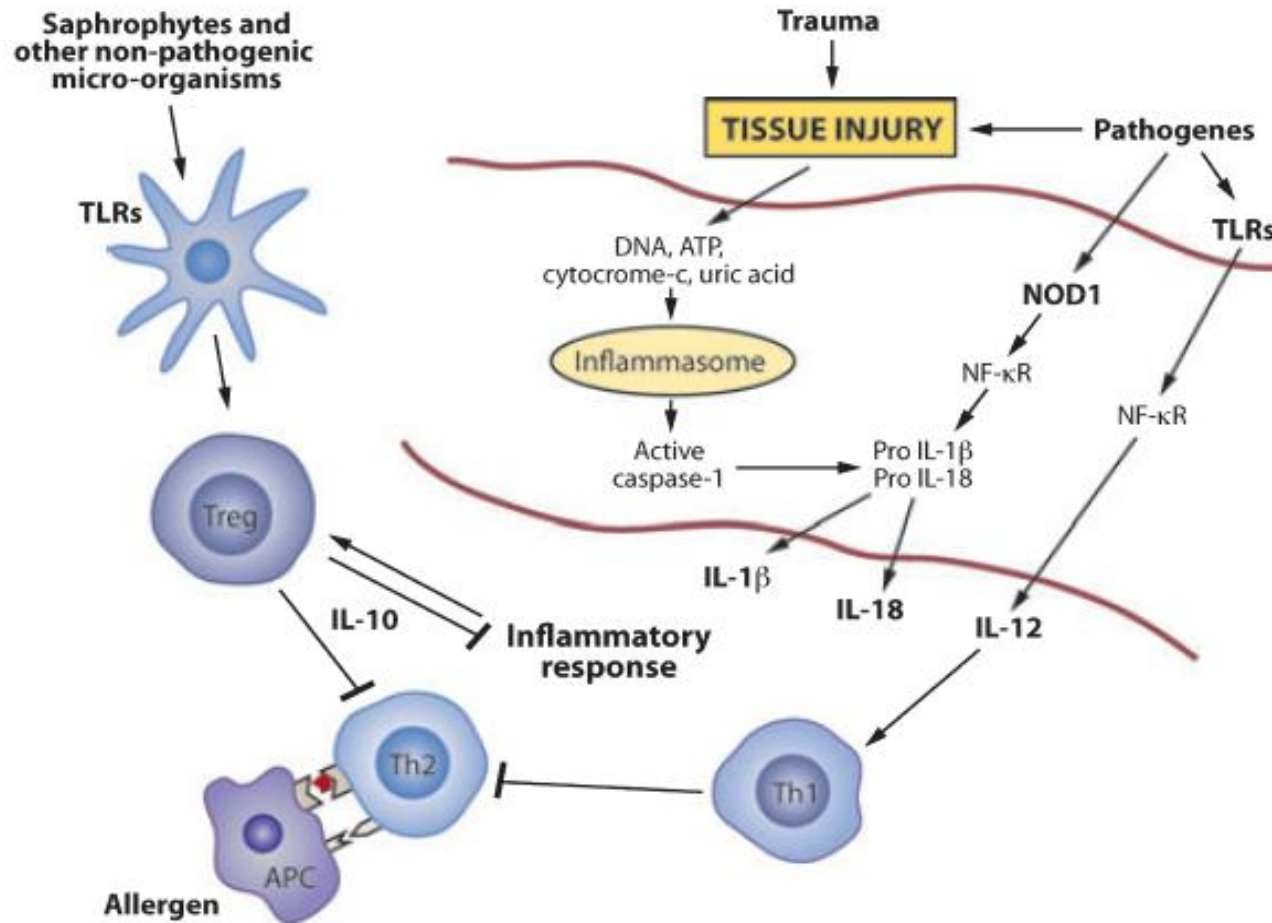
EOS



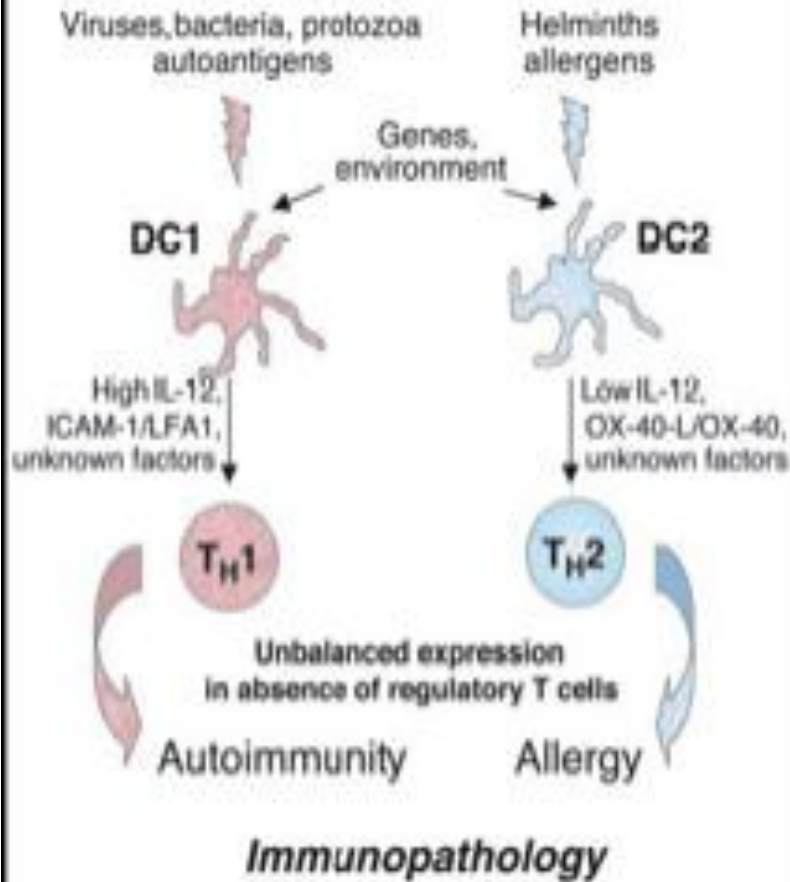
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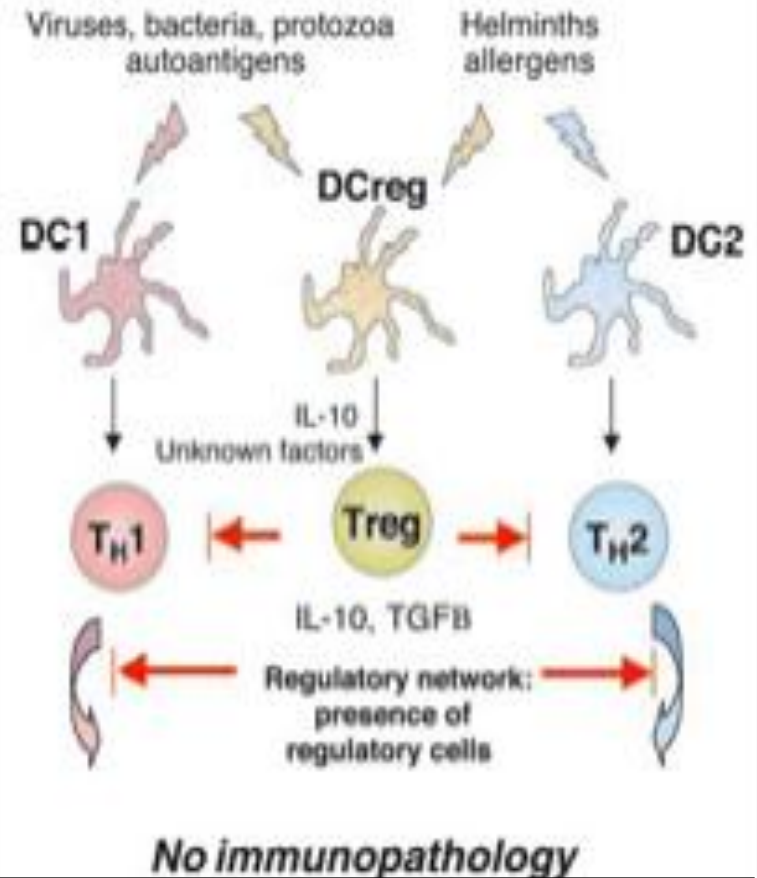
Besin Alerjilerinde Tanı



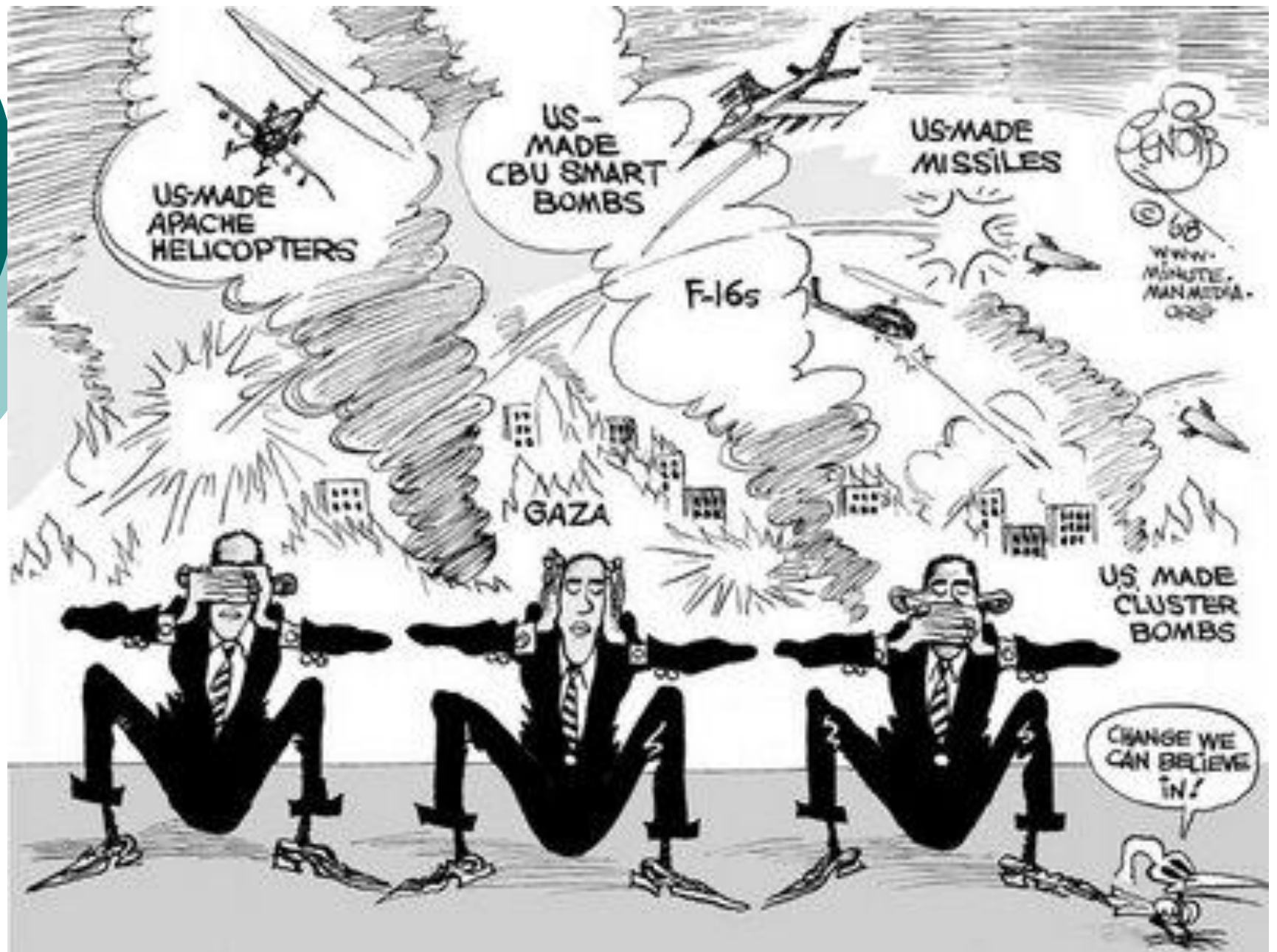
High hygiene, low pathogen/adjuvant burden



Low hygiene, high pathogen/adjuvant burden

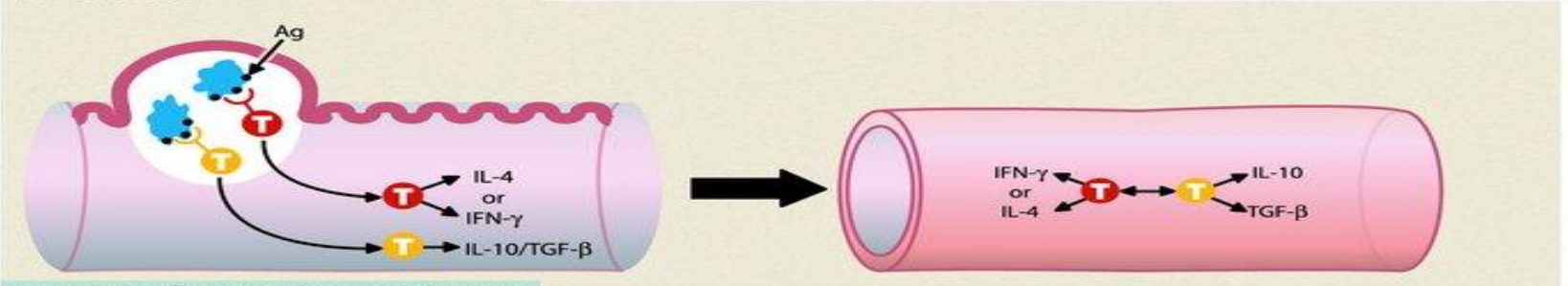


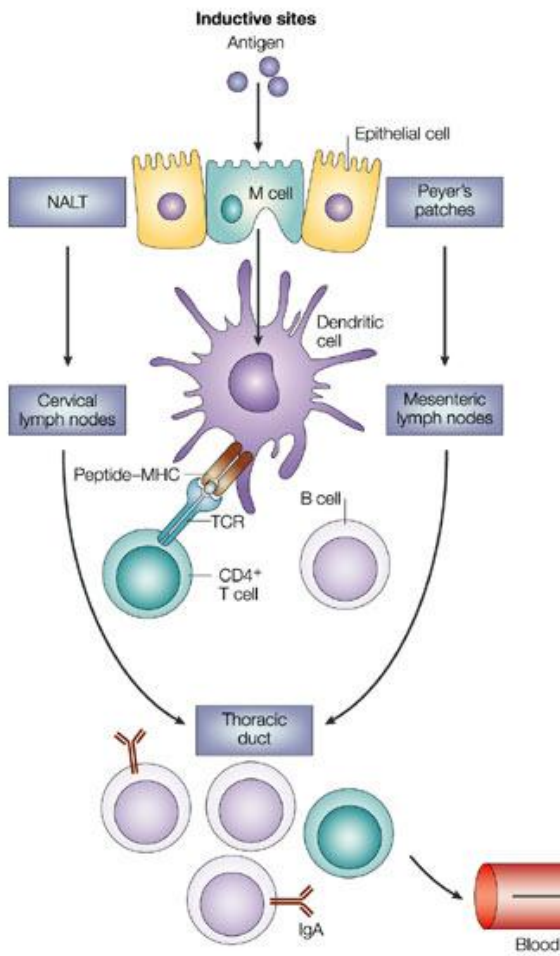
Intestinal Sessizlik



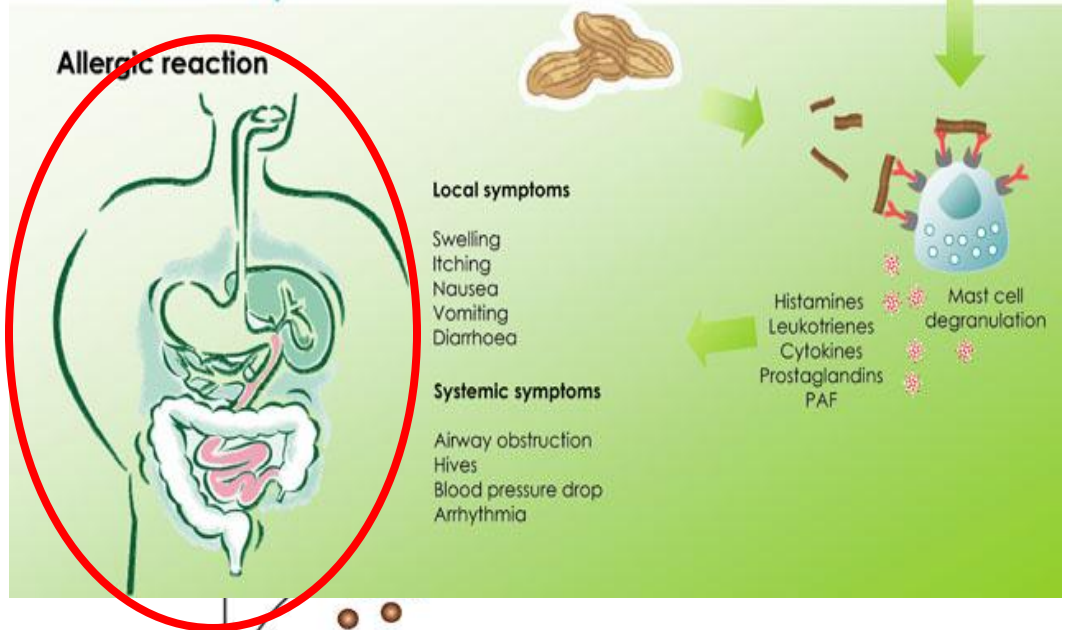
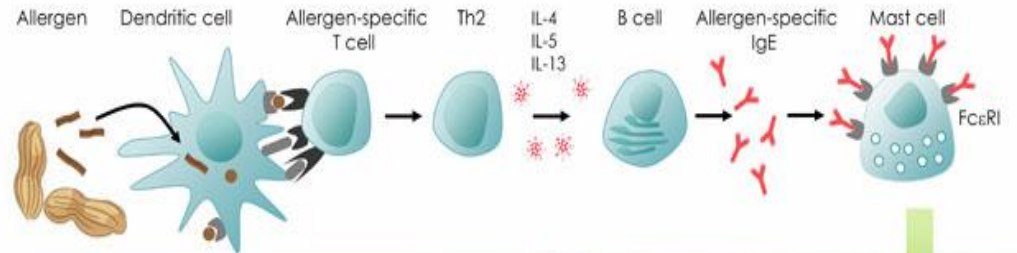
TOLERANS

Normal state

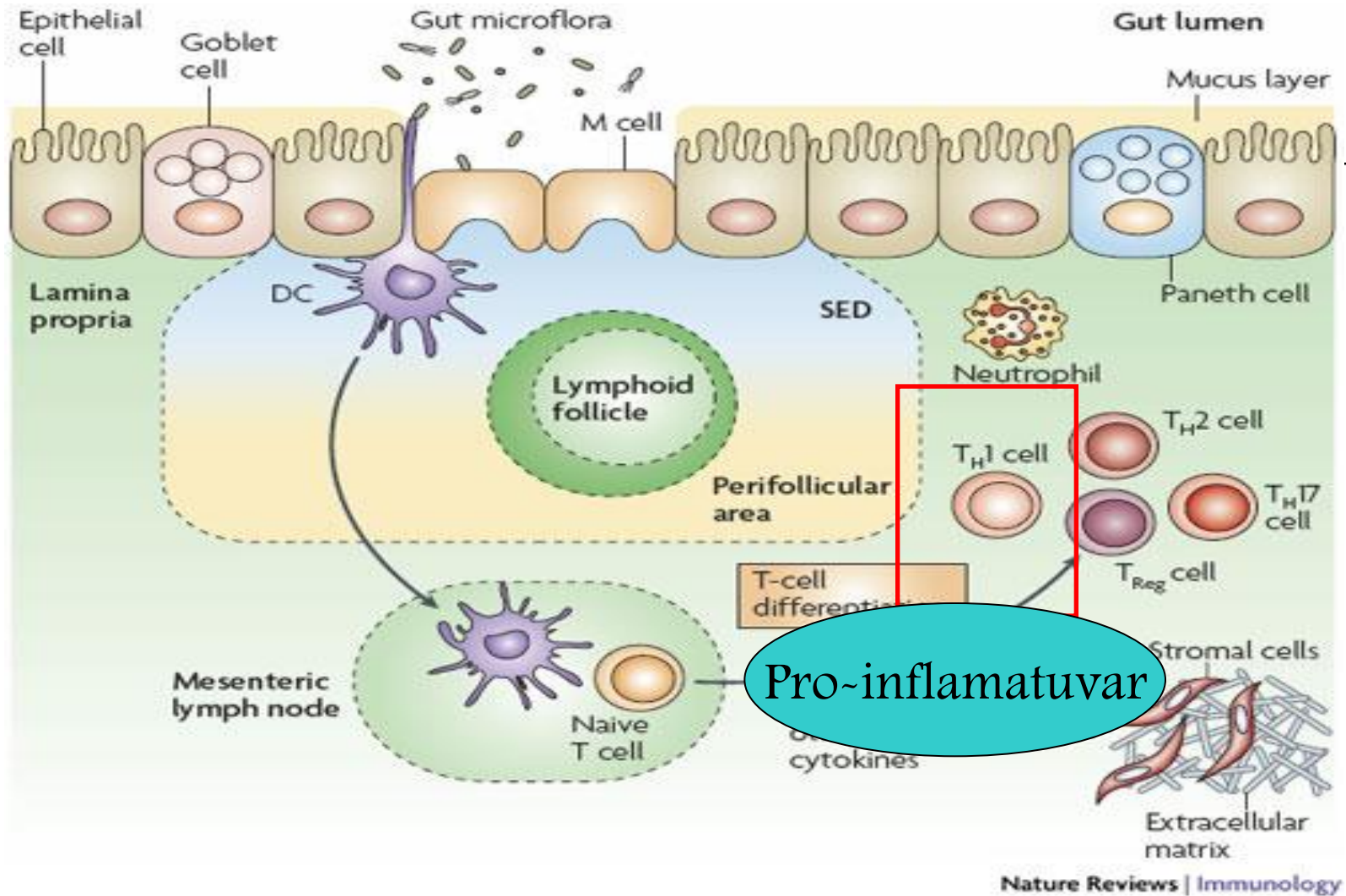




Sensitisation



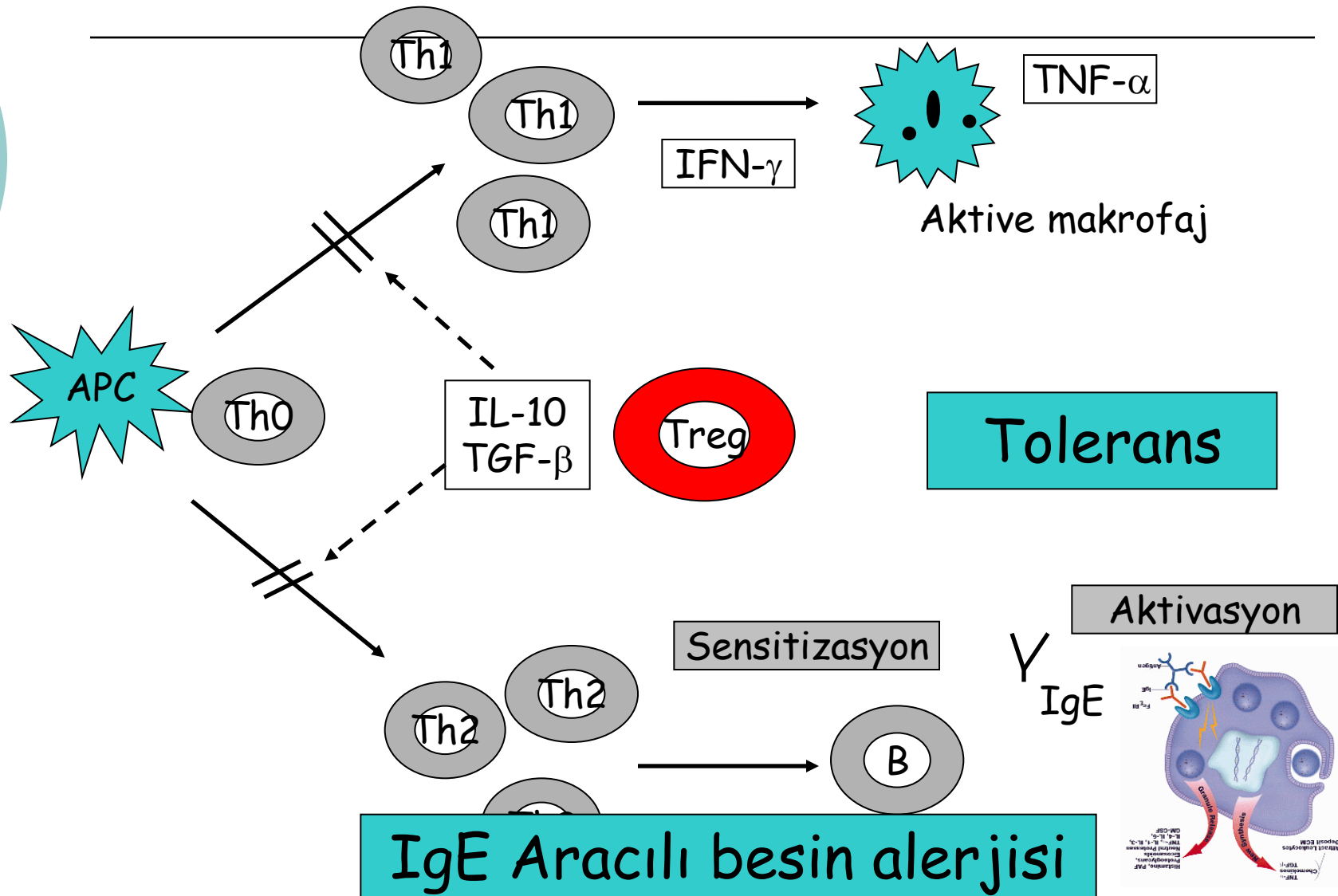
IgE Aracılı İmmun Yanıt



Pro-inflamatuvar

Non-IgE Aracılı İmmun Yanıt

Non-IgE aracılı besin alerjisi



Besin Alerjenleri

1. Süt

○ Süt de en yaygın alerjen

○

○

1. Salt anne sütü ile beslenen

○

2. Formüla ile beslenen

ve

○

3. Karışık beslenen

ştiriyor

○

→

○ Tüketilen besinler

hayvanları

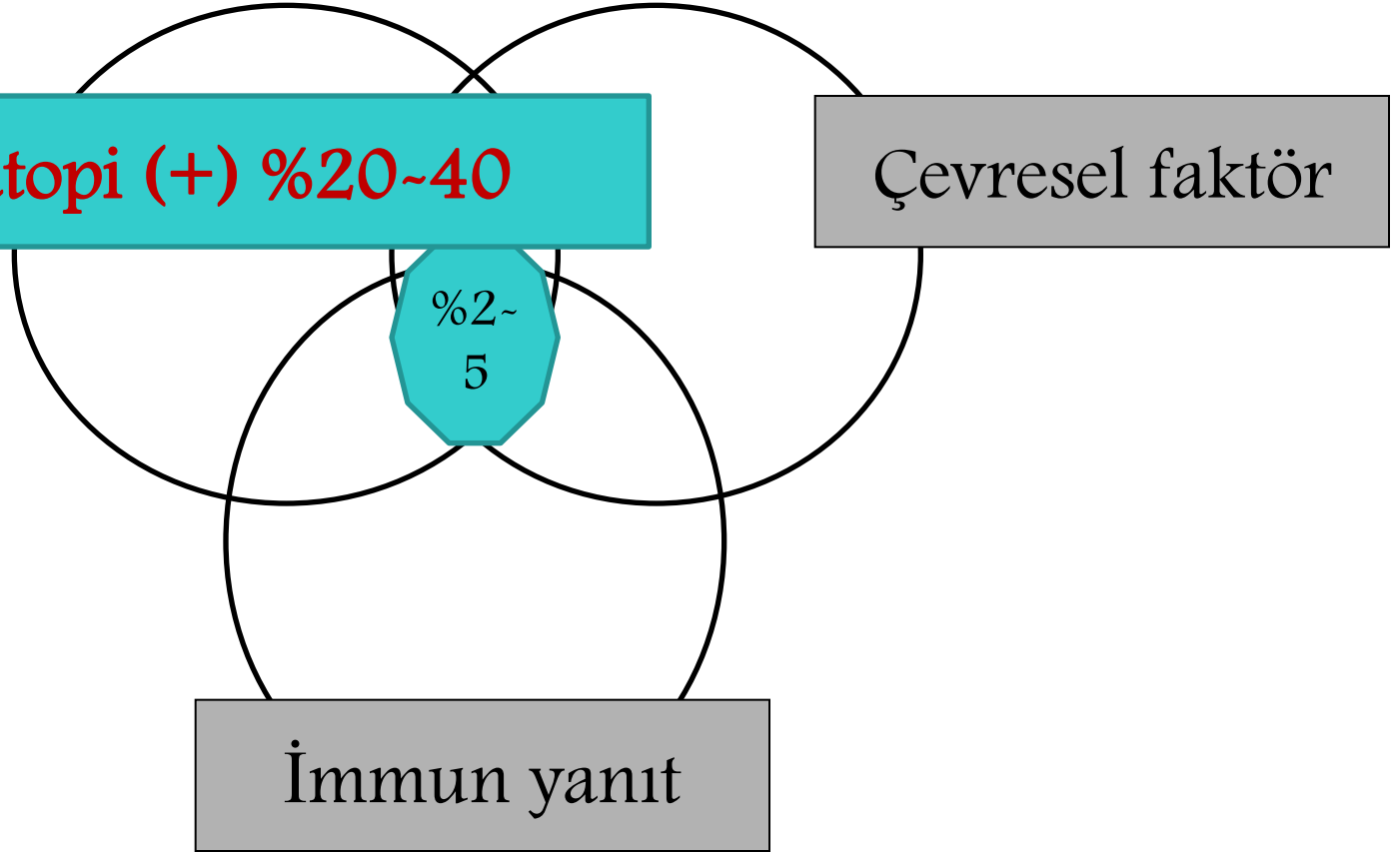
Besin Alerjisi

Ailede atopi (+) %20~40

Çevresel faktör

%2~
5

İmmun yanıt



Besin Alerjilerinde Tanı

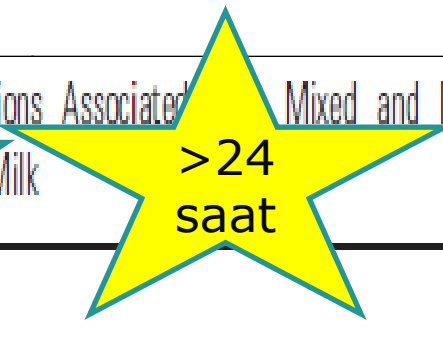
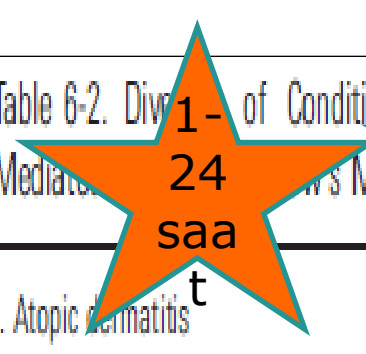
Table 6-1. Diversity of Conditions Associated With IgE-Mediated Reactions To Cow's Milk⁷

- I. Systemic IgE-mediated reactions (anaphylaxis)
 - A. Immediate-onset reactions
 - B. Late-onset reactions
- II. IgE-mediated gastrointestinal reactions
 - A. Oral allergy syndrome
 - B. Immediate gastrointestinal allergy
- III. IgE-mediated respiratory reactions
 - A. Asthma and rhinitis secondary to ingestion of milk
 - B. Asthma and rhinitis secondary to inhalation of milk (eg, occupational asthma)
- IV. IgE-mediated cutaneous reactions
 - A. Immediate-onset reactions
 - 1. Acute urticaria or angioedema
 - 2. Contact urticaria
 - B. Late-onset reactions
- Atopic dermatitis



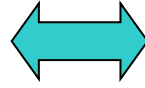
Table 6-2. Diversity of Conditions Associated With Mixed and Non-IgE-Mediated Reactions To Cow's Milk

- I. Atopic dermatitis
 - A. Immediate-onset reactions
 - B. Late-onset reactions
- II. Non IgE-mediated gastrointestinal reactions
 - Gastro-oesophageal reflux disease (GERD)
 - Crico-pharyngeal spasm
 - Pyloric stenosis
 - Allergic eosinophilic oesophagitis (EoE)
 - Cow's milk protein-induced enteropathy
 - Constipation
 - Severe irritability (colic)
 - Food protein-induced gastroenteritis and proctocolitis
- III. Non-IgE-mediated respiratory reactions
 - Heiner's Syndrome



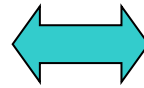
Besin Alerjilerinde Tanı

•GERH
•Konstipasyon



•İnek Sütü Alerjisi
•İnek Sütü İntoleransı
•Eosinofilik GEP

•Dismotilite



•İnflamasyon

TABLE 1. Some symptoms and signs related to CMPA

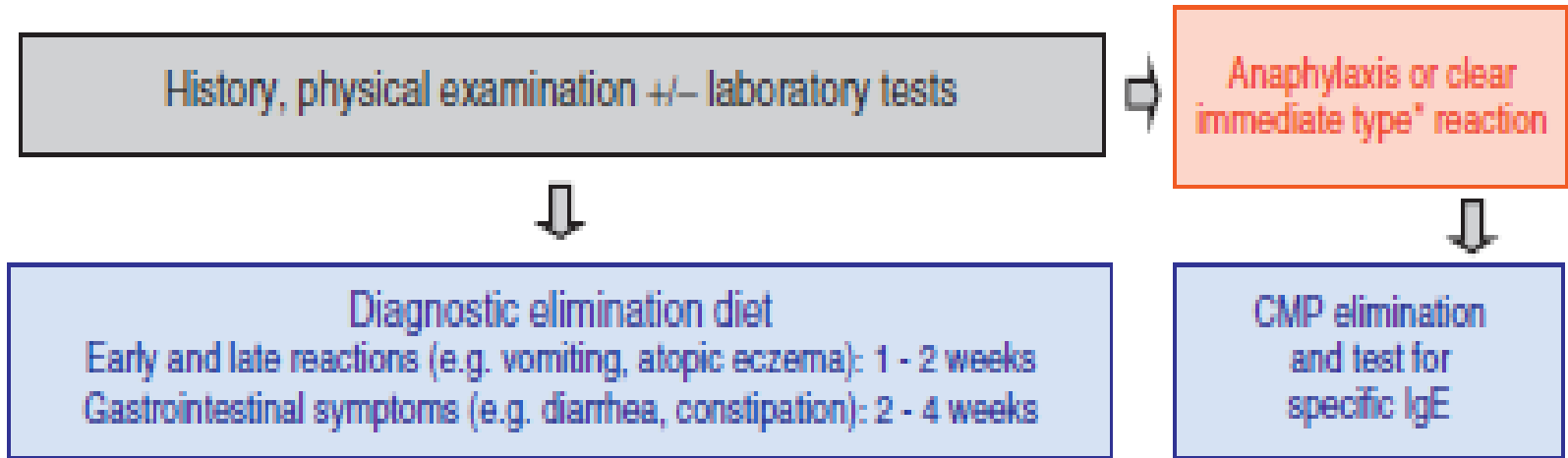
	Infants and toddlers	Older children	Immediate reaction (within min–2h after ingesting CMP)
Digestive	Dysphagia Frequent regurgitation Colic, abdominal pain Vomiting Anorexia, refusal to feed Diarrhea ± intestinal protein or blood loss	Dysphagia Food impaction Regurgitation Dyspepsia Nausea, vomiting Anorexia, early satiety	Vomiting
Respiratory	<p>≥2 hedef organ semptomu varlığı gıda alerjisi olasılığını arttırır.</p>		or stridor difficulties
Skin	Urticaria (unrelated to infections, drug intake, or other causes) Atopic eczema Angioedema (swelling of lips or eyelids)	Urticaria (unrelated to infections, drug intake, or other causes) Atopic eczema Angioedema (swelling of lips or eyelids)	Urticaria Angioedema
General	Anaphylaxis Shock-like symptoms with severe metabolic acidosis, vomiting, and diarrhea (FPIES)	Anaphylaxis	Anaphylaxis FPIES

Besin Alerjilerinde Tanı

- Şüpheli besin
- *Besin alınması ile reaksiyon arası süre
- *Reaksiyona yol açan besin miktarı
- *Reaksiyon sıklığı
- *Semptom ve bulgular
- *Besin çiğ veya pişmiş mi?
- *Restorantta yeme öyküsü?
- *Besinlerde kontaminasyon olabilir mi?
- *Reaksiyon yeri

Diyet günlüğü

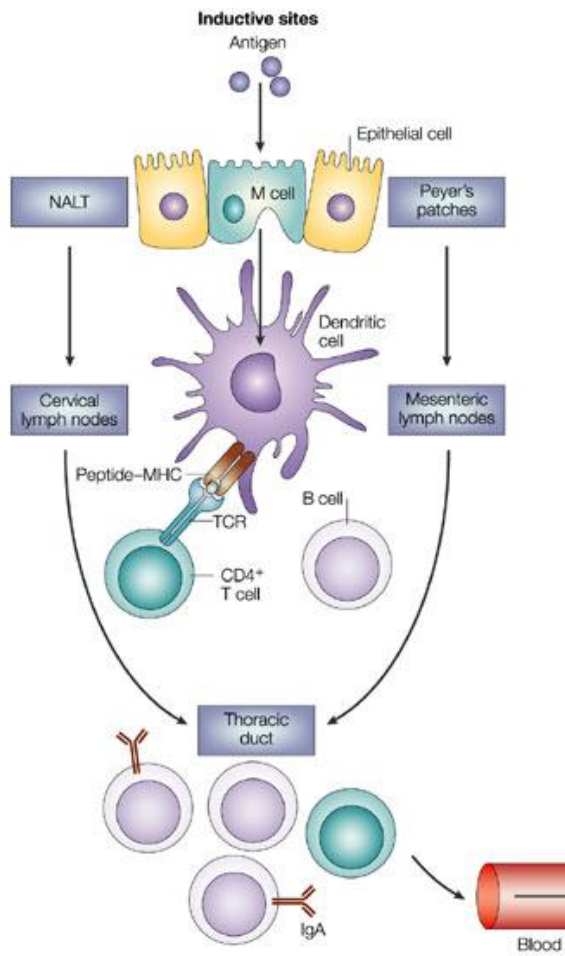
Besin Alerjilerinde Tanı



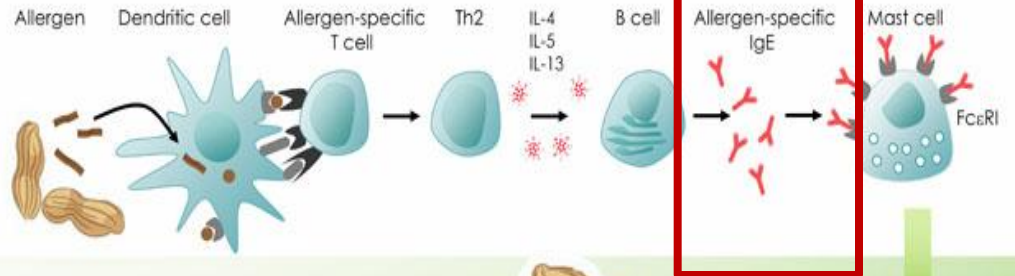
Ağır besin alerjisi :

*GİS: Büyüme geriliği, şiddetli kanama, protein kaybettici enteropti

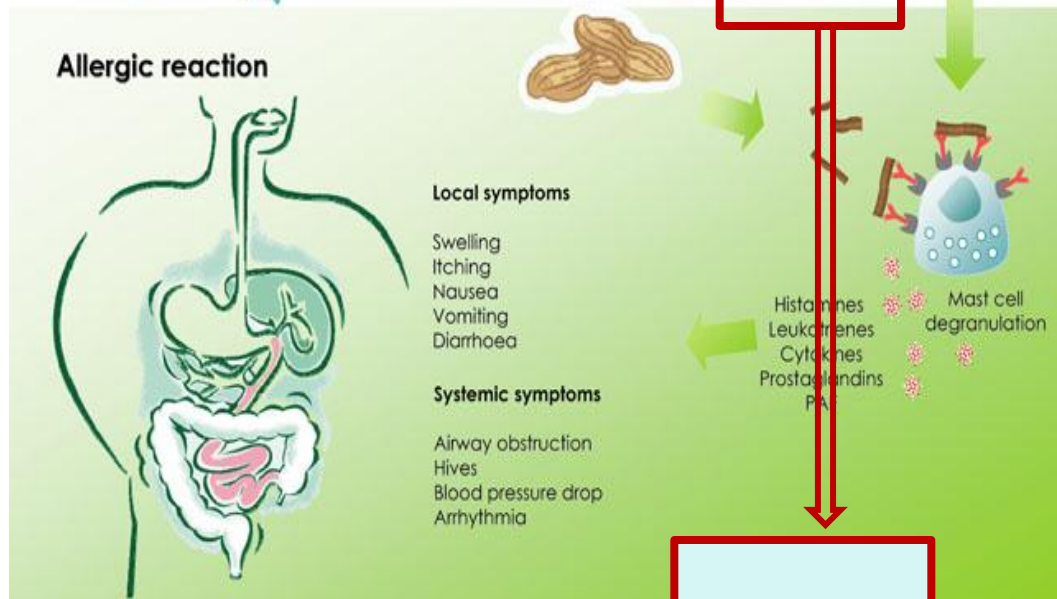
*Cilt: Ağır atopik dermatit + BG



Sensitisation



Allergic reaction



•RAST

Besin Alerjilerinde Tanı

- Hastanın biyolojik duyarlılığını gösterir.
- Tek başına besin duyarlılığı besin alerjisi tanısı koydurmaz.
- Klinik yakınma ve öykü eşliğinde değerlendirilmelidir.
- Tolerans gelişimini takipte düşen değerler anlamlı, yükselen değerler ise anlam ifade etmez.

<0,35

0,35-0

0,70-3

3,5-17

17,5-5

50-100

PV %

8

5

00

00

3

4

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- Diagnostik eliminasyon diyeti ⇒

Ağır atopik egzema, BG gelişmiş enterokolit, hipoproteinemi ve/veya derin anemi gelişen ağır semptomlu bebekte max. 2 hf anne sütü →AAF ↑

- Formula veya karışık beslenen bebek

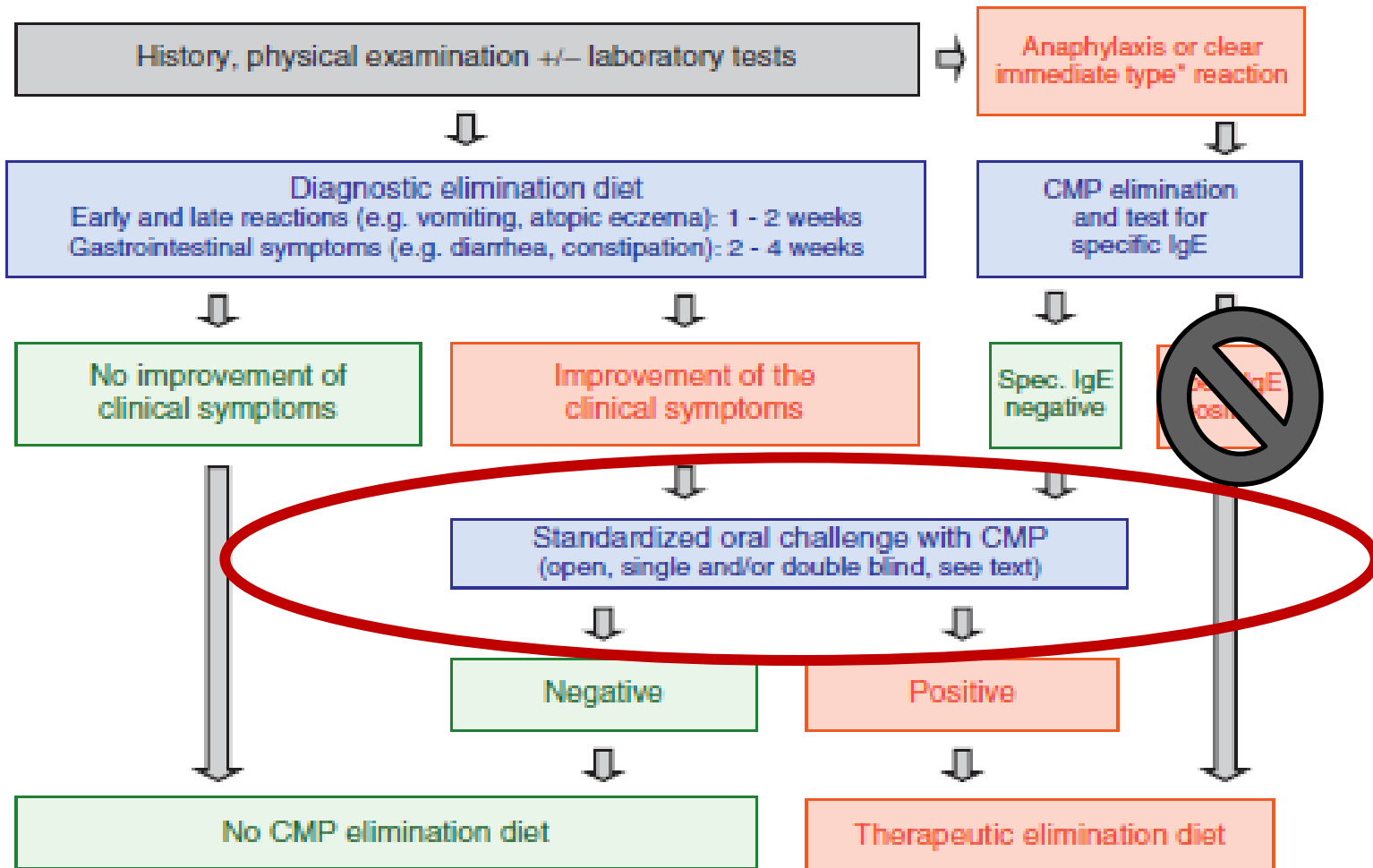
- Tüm ek gıdalar test süresince
- Büyük çocuk → süt, soya yur
- Ağır form → AAF
- Orta ve hafif hst. → eHf
- >6 ay soya bazlı formula ?
- Keçi, koyun sütü şiddetle yasak!

eHF → rezidüel ag +
eHF → Ig E reak. +
eHF → çoklu gıda ?

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- Tanısal eliminasyon diyetinin süresini besine reaksiyonun zamanı belirler⇒
 - Angioödem, kusma, ani egzema→ 3-5 gün
 - Egzemada artış, rektal kanama→ 1-2 hafta
 - Kronik ishal, büyüme geriliği→ 2-4 hafta

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Besin Alerjilerinde Tanı

Oral besin yükleme/Provokasyon

Giderek artan miktardaki gıda maddelerinin hastaya verilmesi ile klinik ve laboratuvar bulgu oluşturulması.

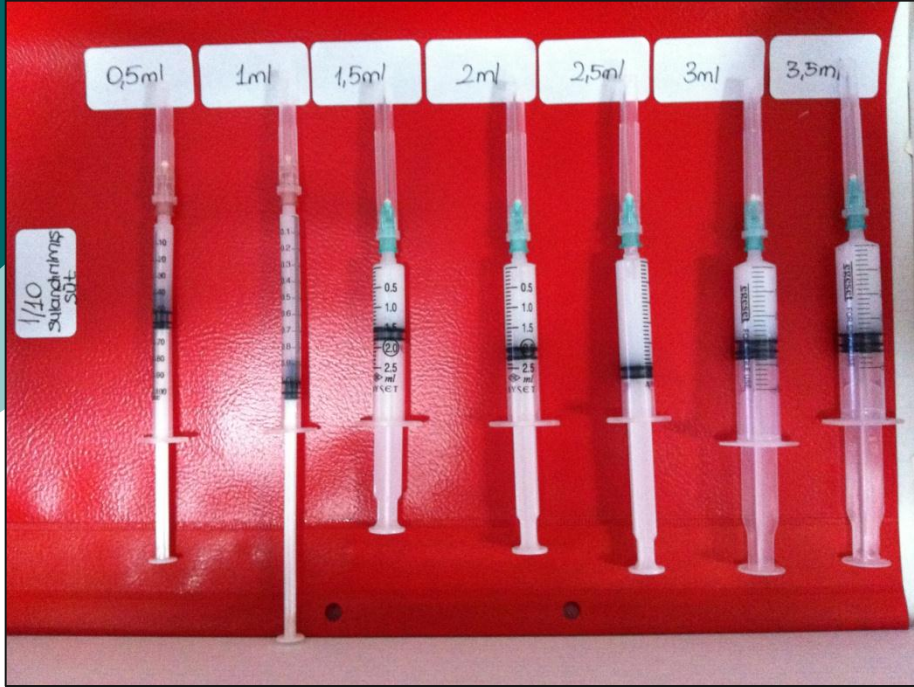
1~ Açık yükleme: 3 yaşın altında en sık

2~ Tek taraflı açık

3~ Çift kör, plasebo kontrollü (DBPC):**Altın standart!**

Besin Alerjilerinde Tanı

Oral besin yükleme/Provakasyon



LAKTOZ

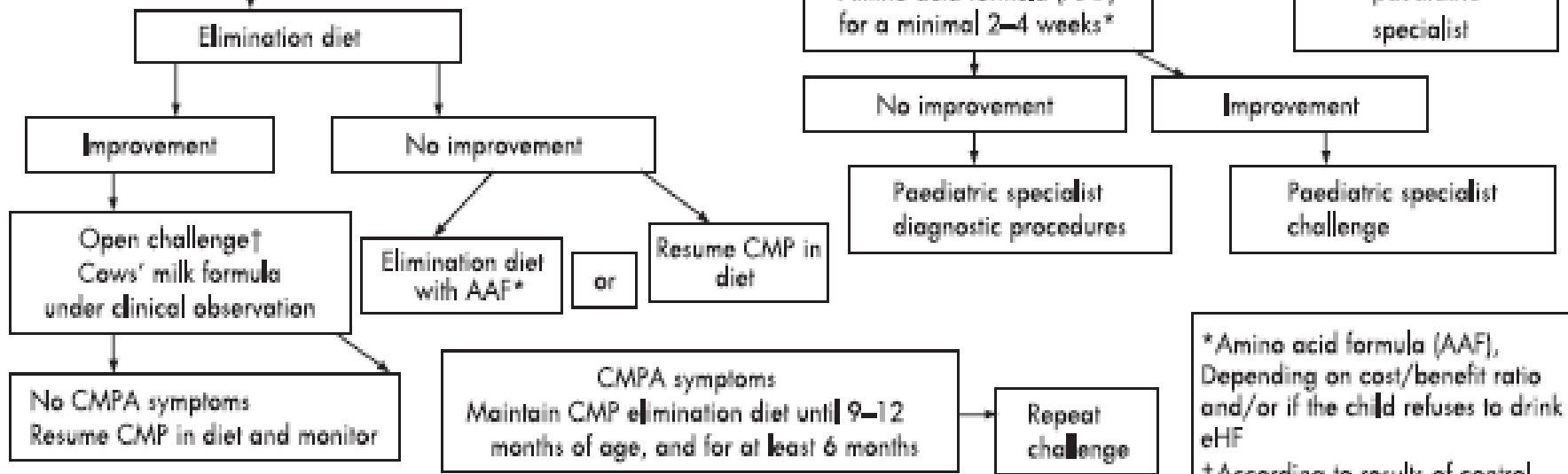
Suspicion of cows' milk protein allergy (CMPA)

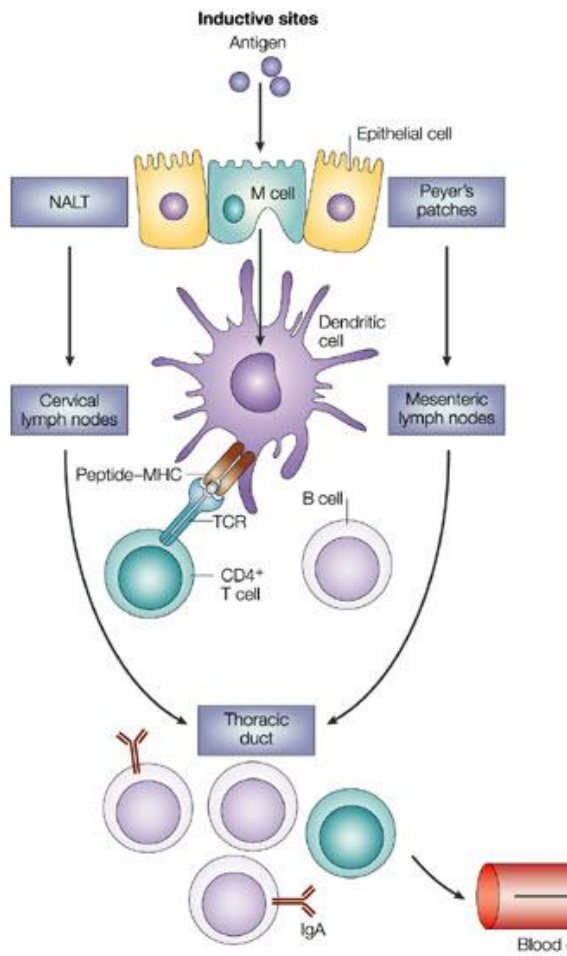
Clinical assessment
 • Clinical findings
 • Family history (risk factor)

Suspicion of mild to moderate CMPA
 One or more of the following symptoms:
 • Gastrointestinal: frequent regurgitation, vomiting, diarrhoea, constipation (with/without perianal rash), blood in stool, iron deficiency anaemia
 • Dermatological: atopic dermatitis, swelling of lips or eye lids (angio-oedema), urticaria unrelated to acute infections, drug intake or other causes
 • Respiratory: runny nose, chronic cough, wheezing (all unrelated to infection)
 • General: persistent distress or colic (≥ 3 h per day wailing/irritable) at least 3 days/week over a period of > 3 weeks
 • Others (rare)

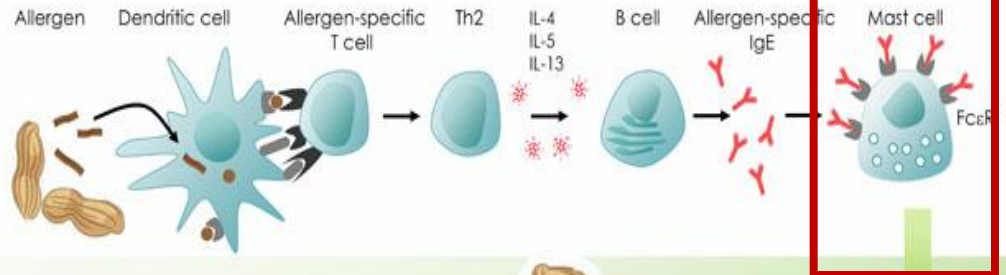
Suspicion of severe CMPA
 One or more of the following symptoms:
 • Gastrointestinal: failure to thrive due to chronic diarrhoea, and/or regurgitation/ vomiting and/or refusal to feed; iron deficiency anaemia due to occult or macroscopic blood loss; protein-losing enteropathy (hypoalbuminaemia); endoscopic/histologically confirmed enteropathy or severe ulcerative colitis
 • Dermatological: exudative or severe atopic dermatitis with hypoalbuminaemia-anaemia or failure to thrive or iron deficiency anaemia
 • Respiratory: acute laryngoedema or bronchial obstruction with difficulty breathing
 • Systemic reactions (anaphylactic shock – needs immediate referral to hospital for management)

Testing for CMPA
 Consider the following:
 • Skin tests: prick test, patch test for CMP
 • Blood: total IgE, specific IgE (RAST) for CMP

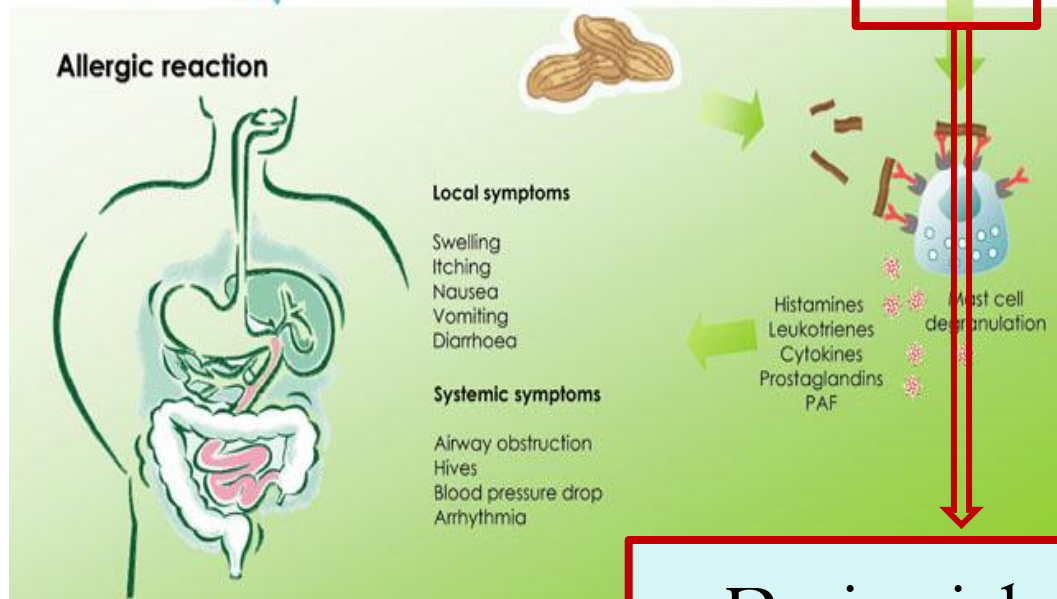




Sensitisation



Allergic reaction



• Deri prick test

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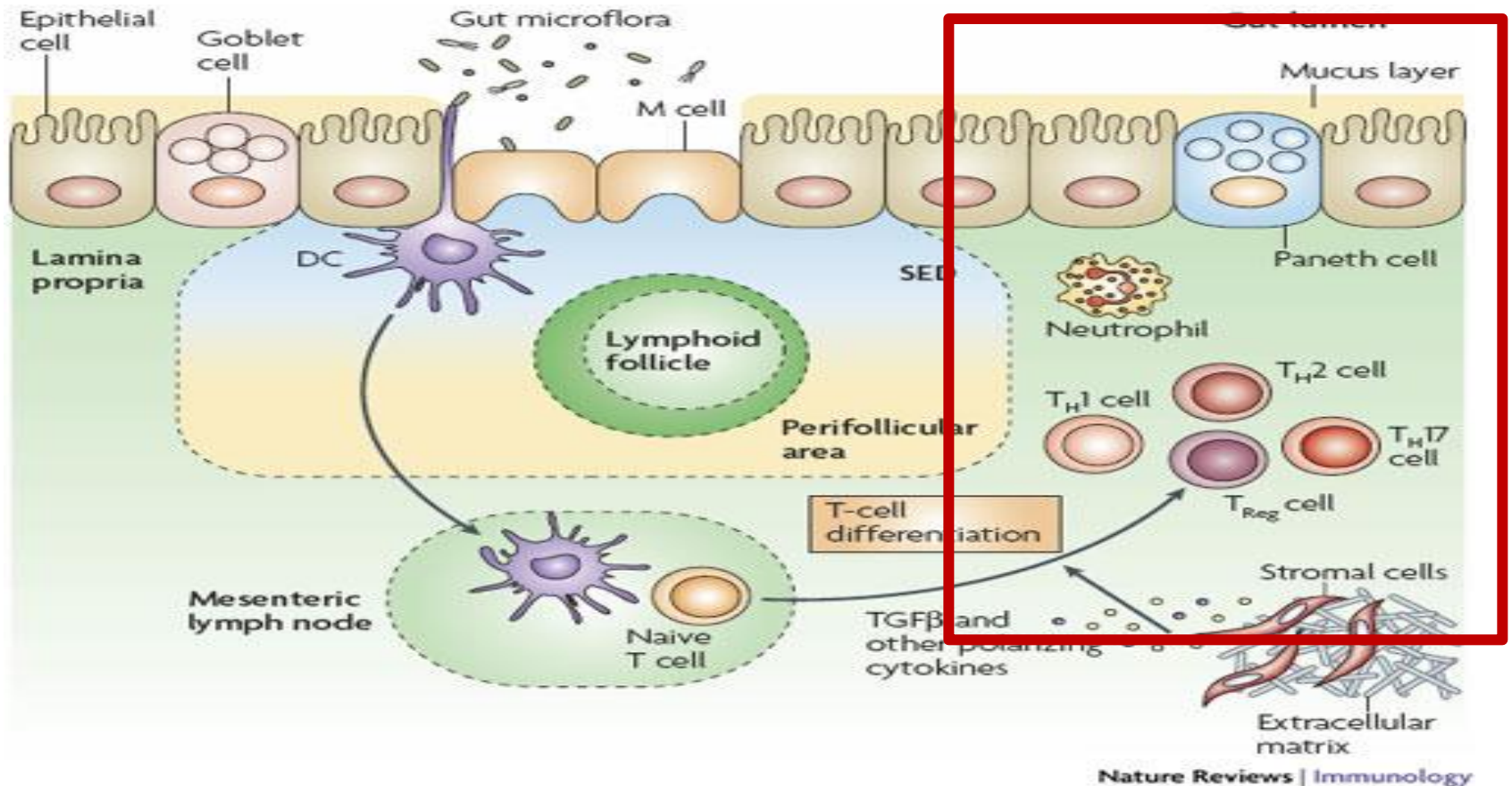
Prick test

≥ 2 yaş: İnek sütü ve fıstık için ≥ 8 mm
Yumurta için ≥ 7 mm
< 2 yaş: İnek sütü için ≥ 6 mm
Fıstık için ≥ 4 mm
Yumurta için ≥ 5 mm
%100 Tanısal!!

The diagnostic value of skin prick testing in children with food allergy
Hill DJ, Heine RG, Hosking CS
Pediatr Allergy Immunol. 2004;15(5):435.



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Besin Alerjilerinde Tanı

Yama testi

Ag. Hazırlanma ve uygulaması → standart yok

Eritem ve papül (++)

Eritem ve vezikül(+++)

Sensitivite %100, spesifite %70



Suspicion of cows' milk protein allergy (CMPA)

Clinical assessment

- Clinical findings
- Family history (risk factor)

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Testing for CMPA

Consider the following:

- Skin tests: prick test, patch test for CMP
- Blood: total IgE, specific IgE (RAST) for CMP

Elimination diet

Improvement

Open challenge†
Cows' milk formula under clinical observation

No CMPA symptoms
Resume CMP in diet and monitor

No improvement

Elimination diet with AAF*

or

Resume CMP in diet

CMPA symptoms
Maintain CMP elimination diet until 9–12 months of age, and for at least 6 months

Repeat challenge

Elimination diet
Amino acid formula (AAF)
for a minimal 2–4 weeks*

and

Referral to paediatric specialist

No improvement

Paediatric specialist diagnostic procedures

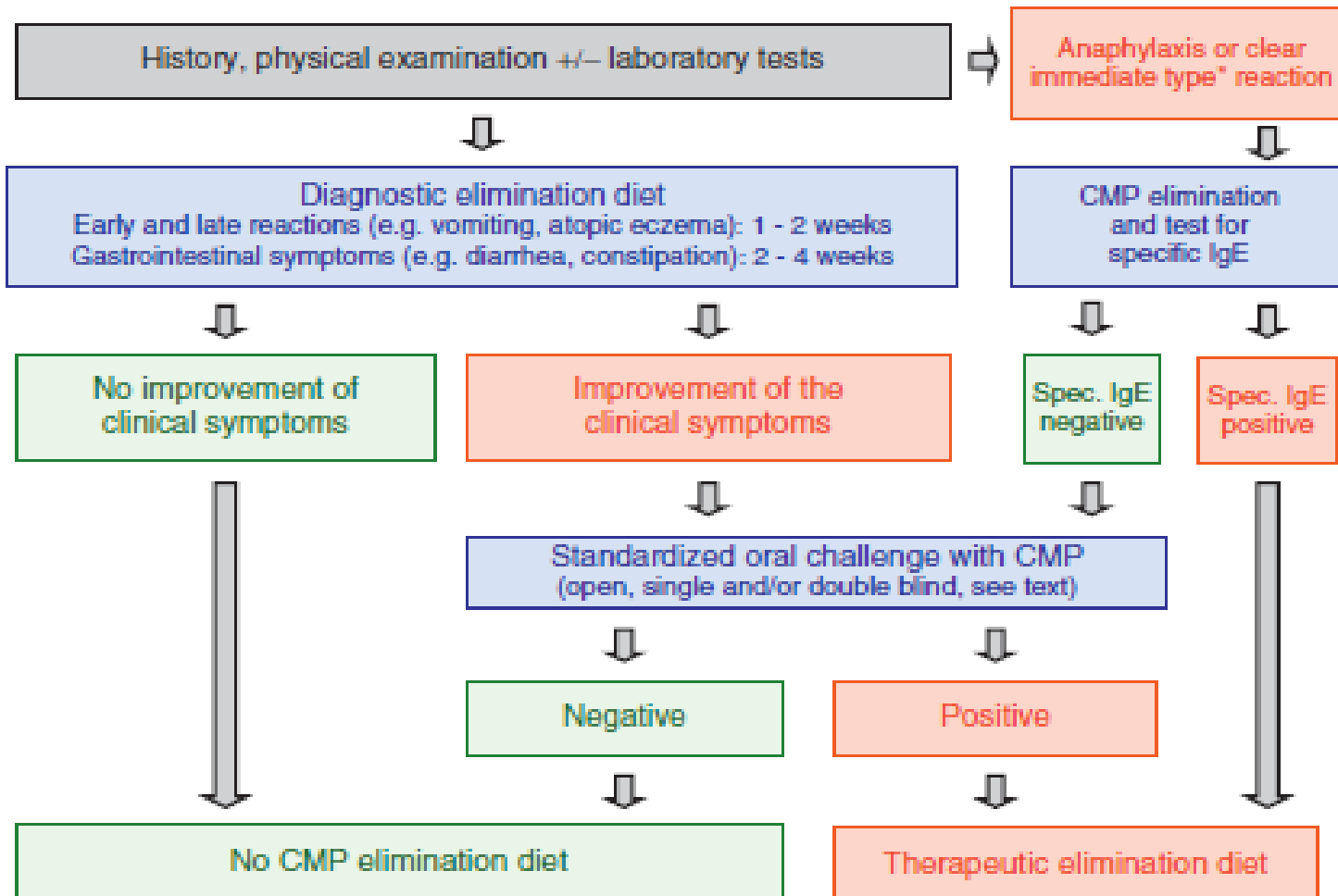
Improvement

Paediatric specialist challenge

* Amino acid formula (AAF), Depending on cost/benefit ratio and/or if the child refuses to drink eHF

† According to results of control testing in IgE-mediated allergy

Besin Alerjilerinde Tanı



Besin Alerjilerinde Tanı

- Besin IgG antikorlarının tanısal değeri yoktur.
- Açıklanamayan ağır GİS yakınması, büyüme geriliği, Fe eksikliği anemisi Üst/alt GİS endoskopisi



Besin Alerjilerinde Tanı

“It is not what disease the patient has but
which patient has the disease.”