



Un'ora con AMD-SID-SIEDP



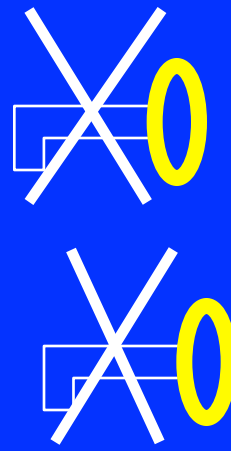
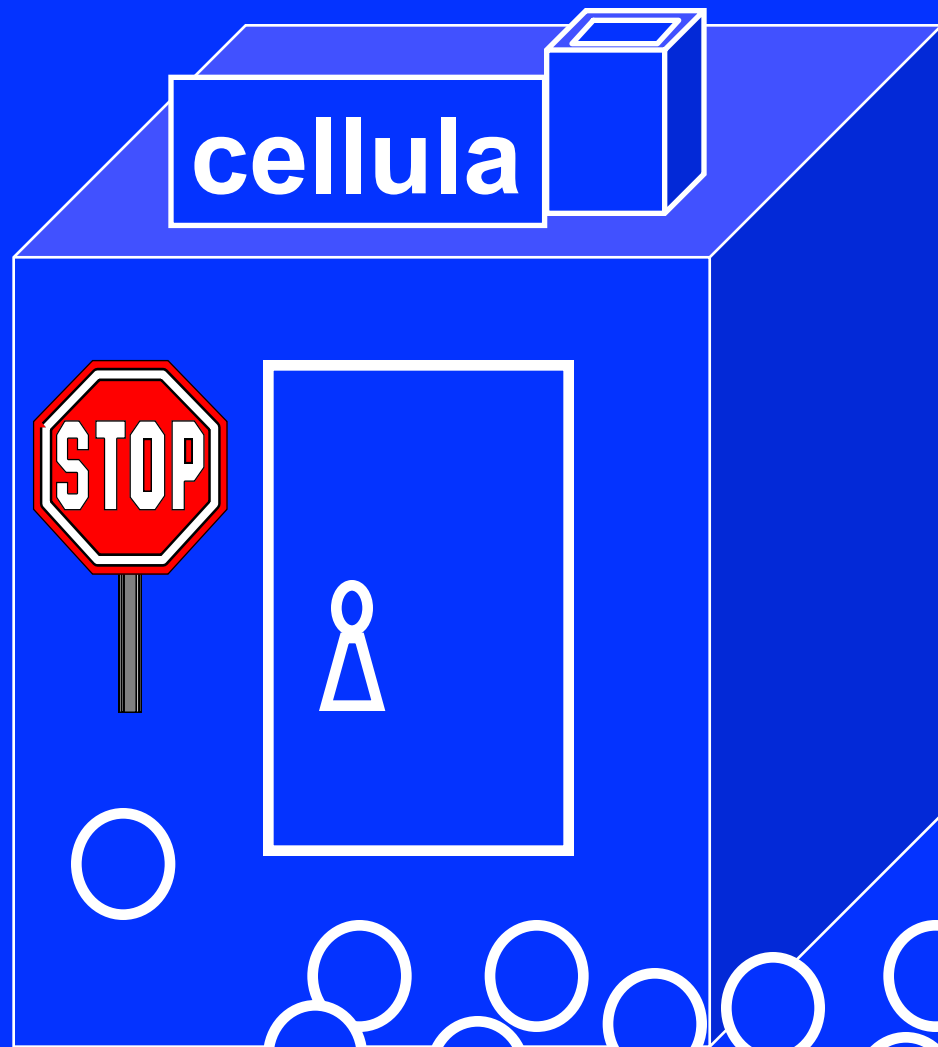
La Terapia Multiiniettiva basal-bolo in età pediatrica

Dr Stefano Tumini

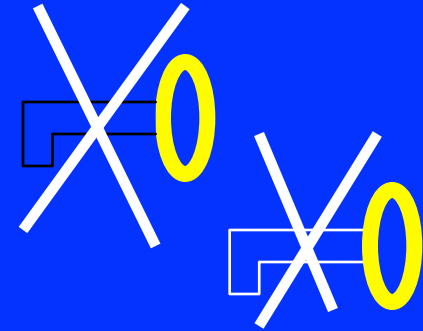
*UOSD Servizio Regionale di Diabetologi Pediatrica e
Prevenzione del Rischio Cardio-Metabolico.*

Ospedale Policlinico Chieti

ASL 2 Abruzzo – Lanciano Vasto Chieti



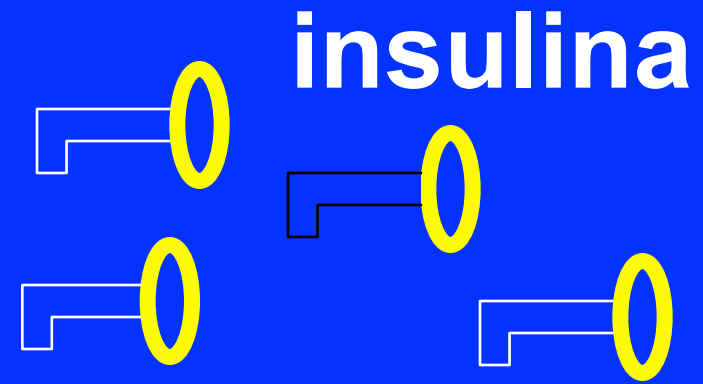
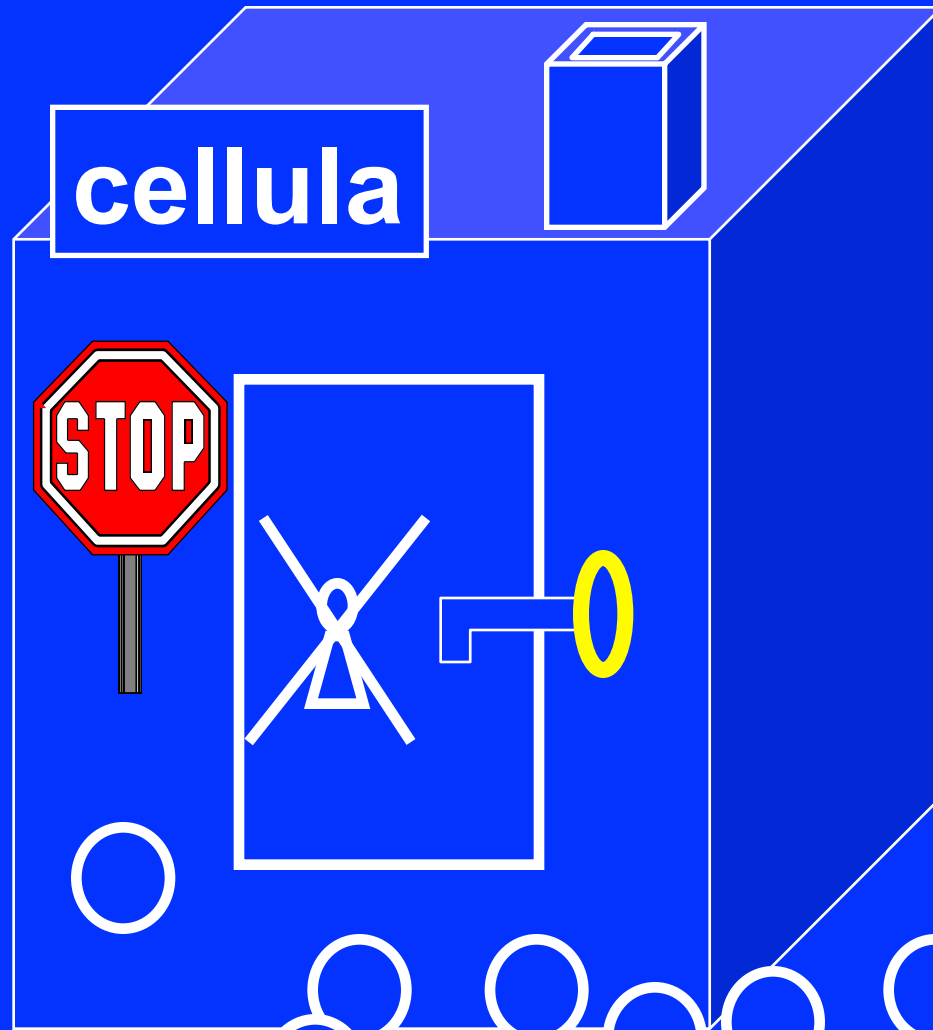
insulina



DIABETE
DI TIPO I

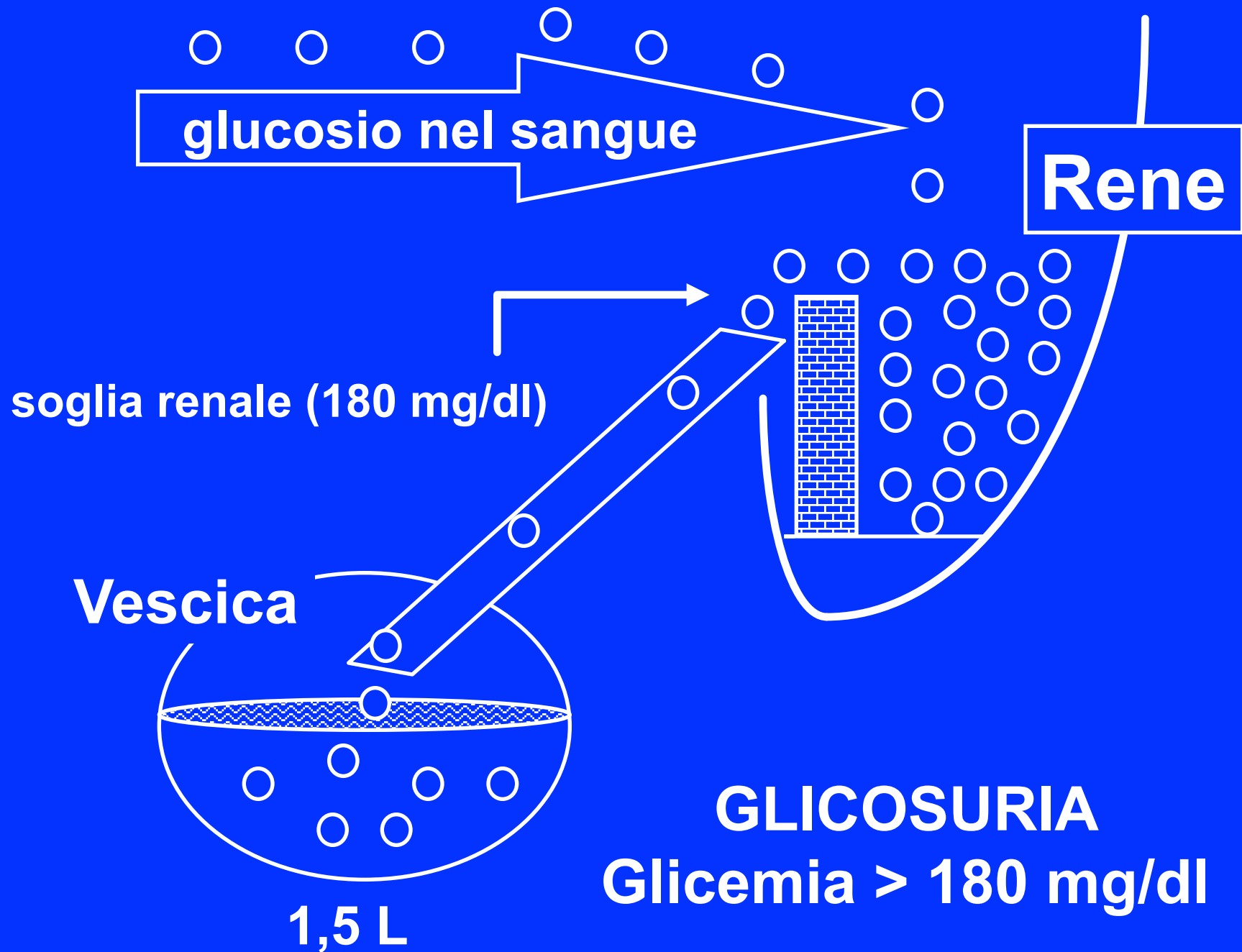
glucosio



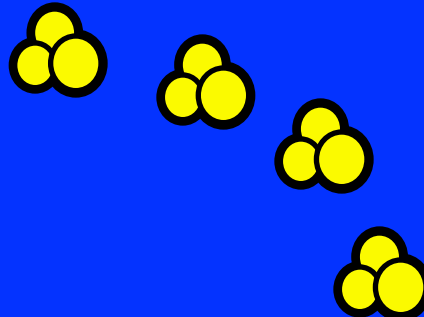
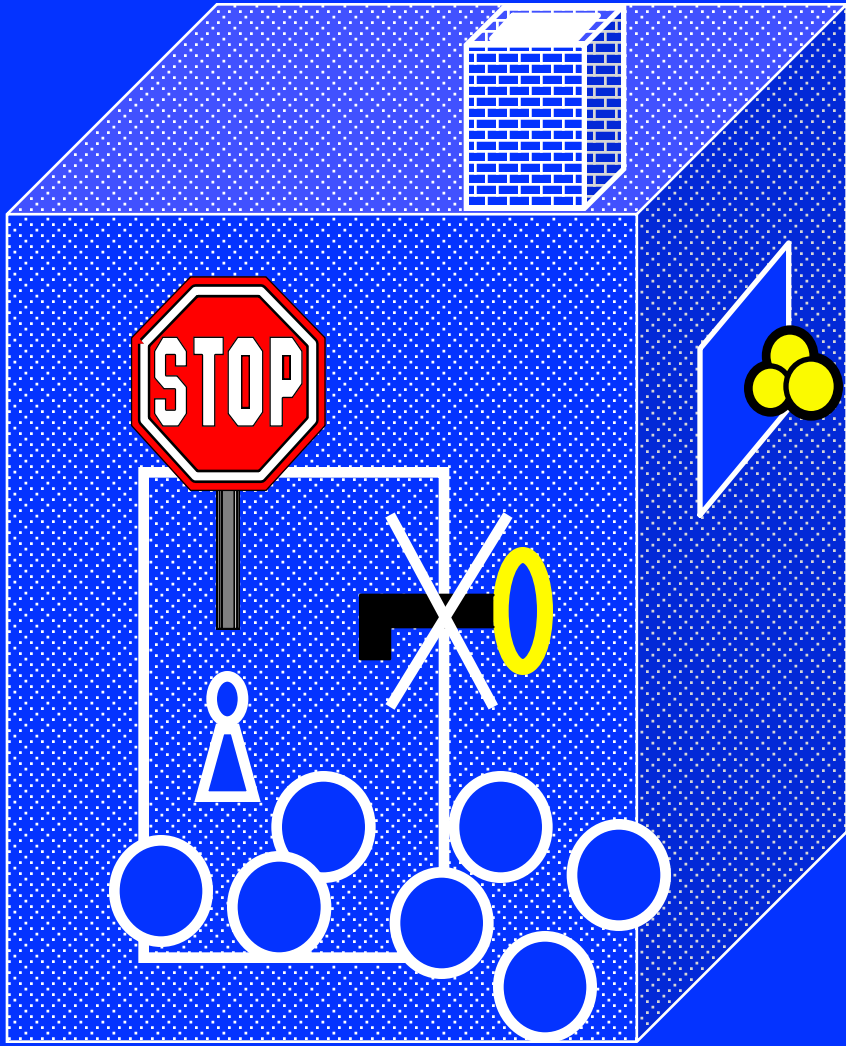


**DIABETE
DI TIPO II**

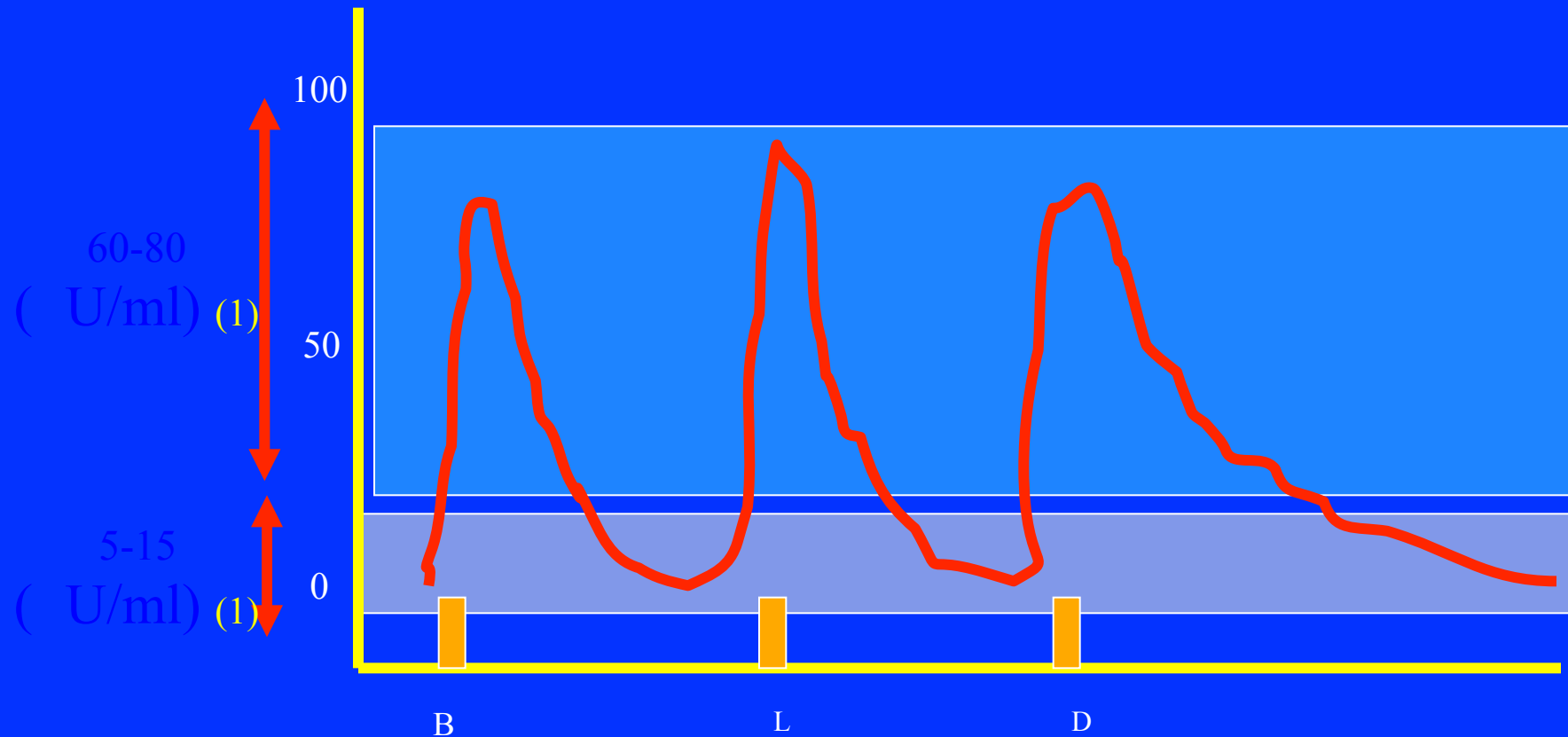




CHETONI

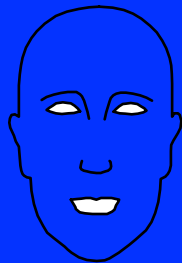
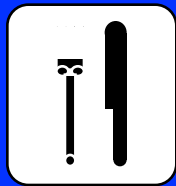


Basal insulin is secreted continuously between meals and throughout the night at a rate of 0.5 to 1 U/hr in adults (2)

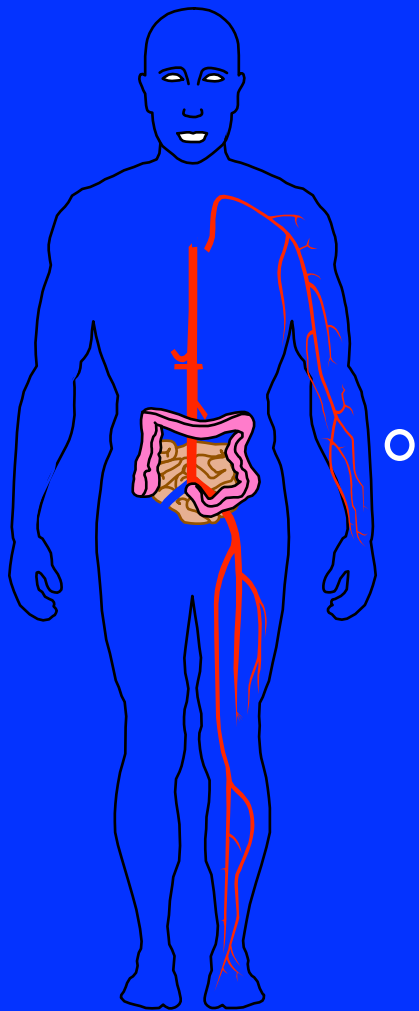


1. Galloway JA. *Horm Metab Res* 1994;26(12):591-8
2. White J, Campbell RK. *Diabetes mellitus*. In: Herfindal ET, Gourley DR, eds. *Textbook of therapeutics: drug and disease management*. 6th ed. Baltimore: Williams & Wilkins, 1996:357-86

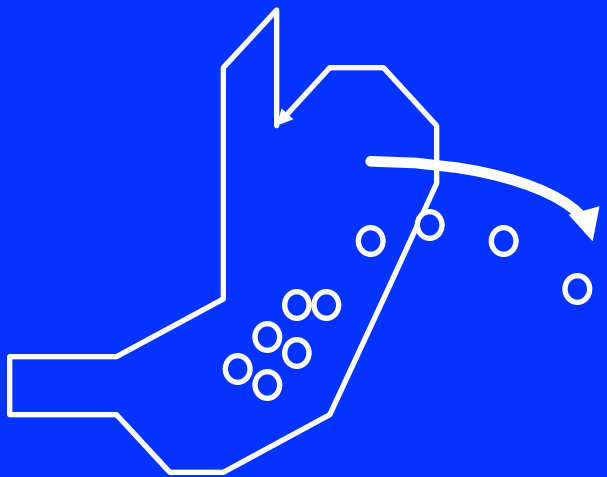
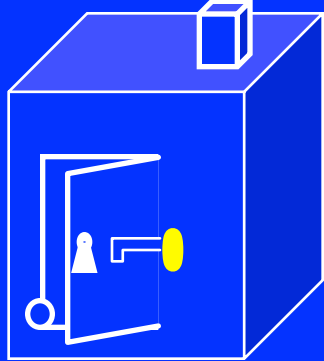
Alimentazione



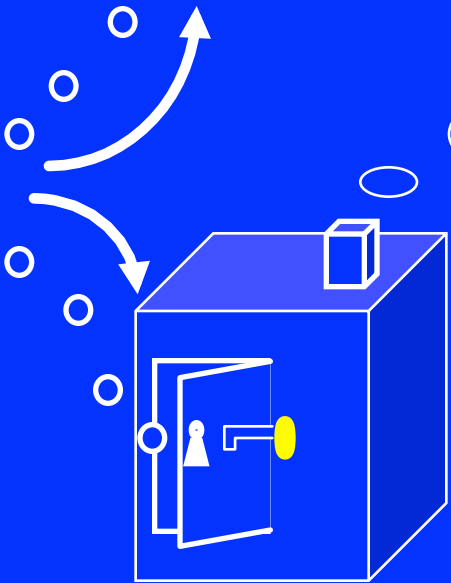
Circolazione



Cellula



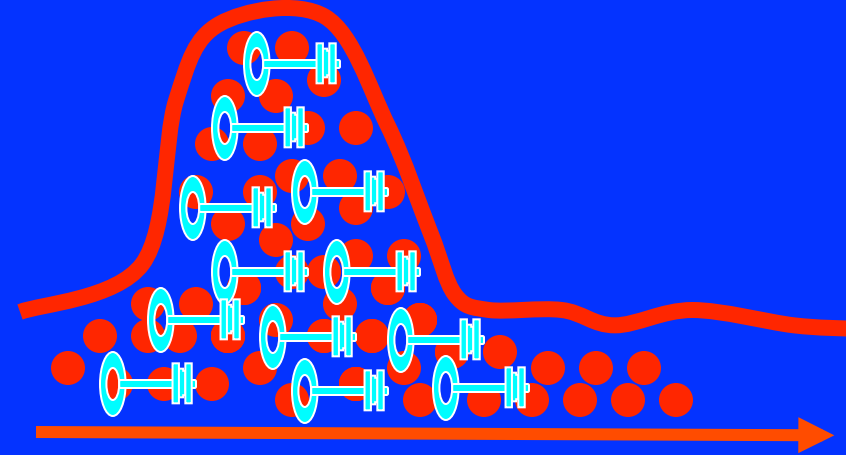
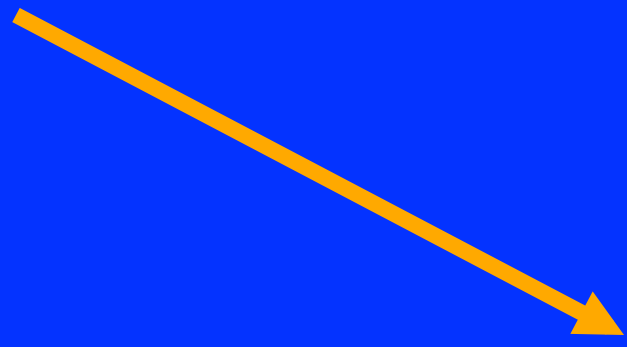
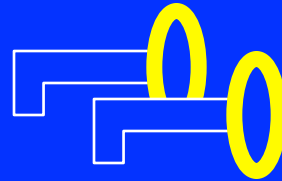
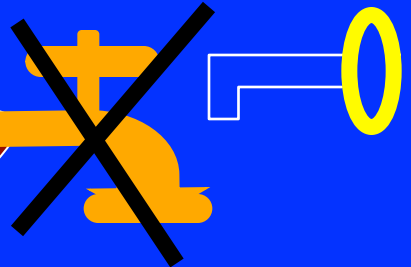
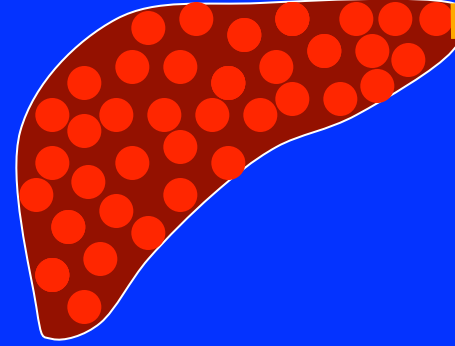
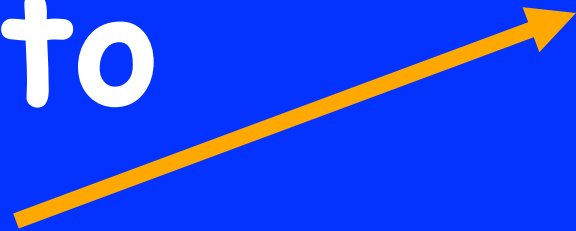
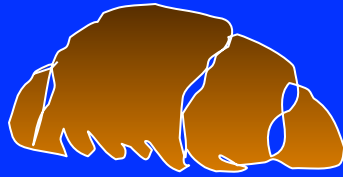
Digestione e assorbimento



Cellula

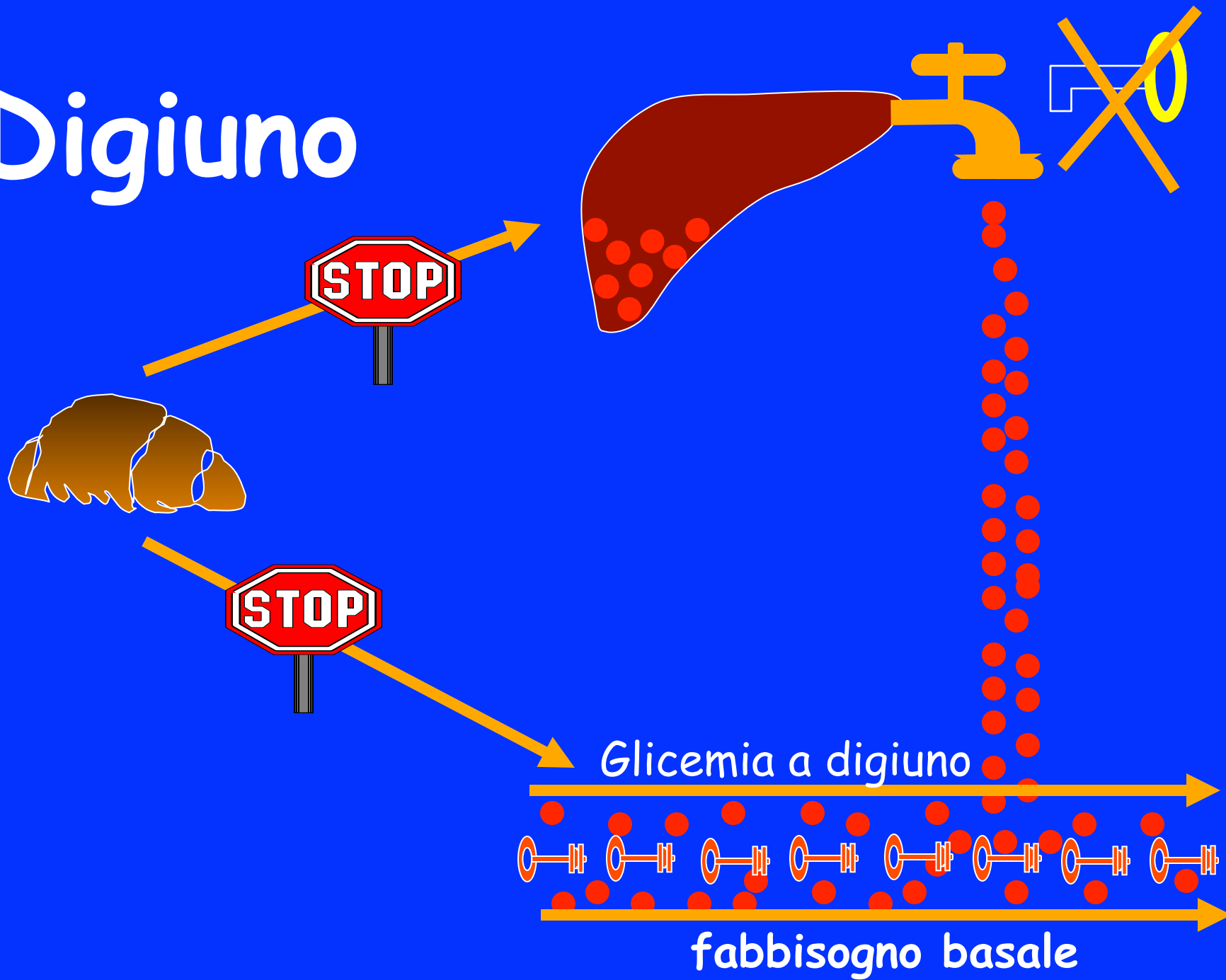
Pasto

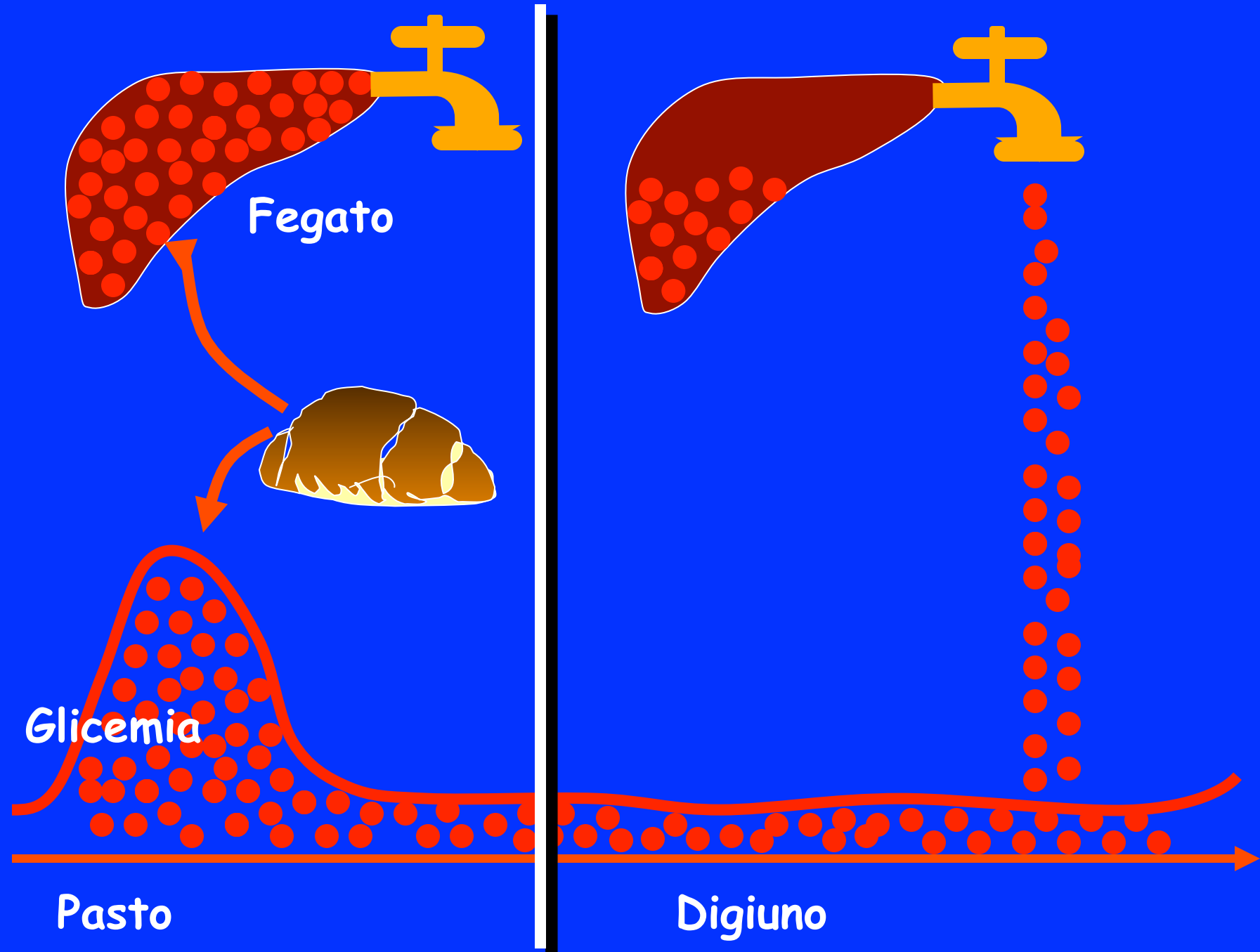
Fegato



Glicemia

Digiuno



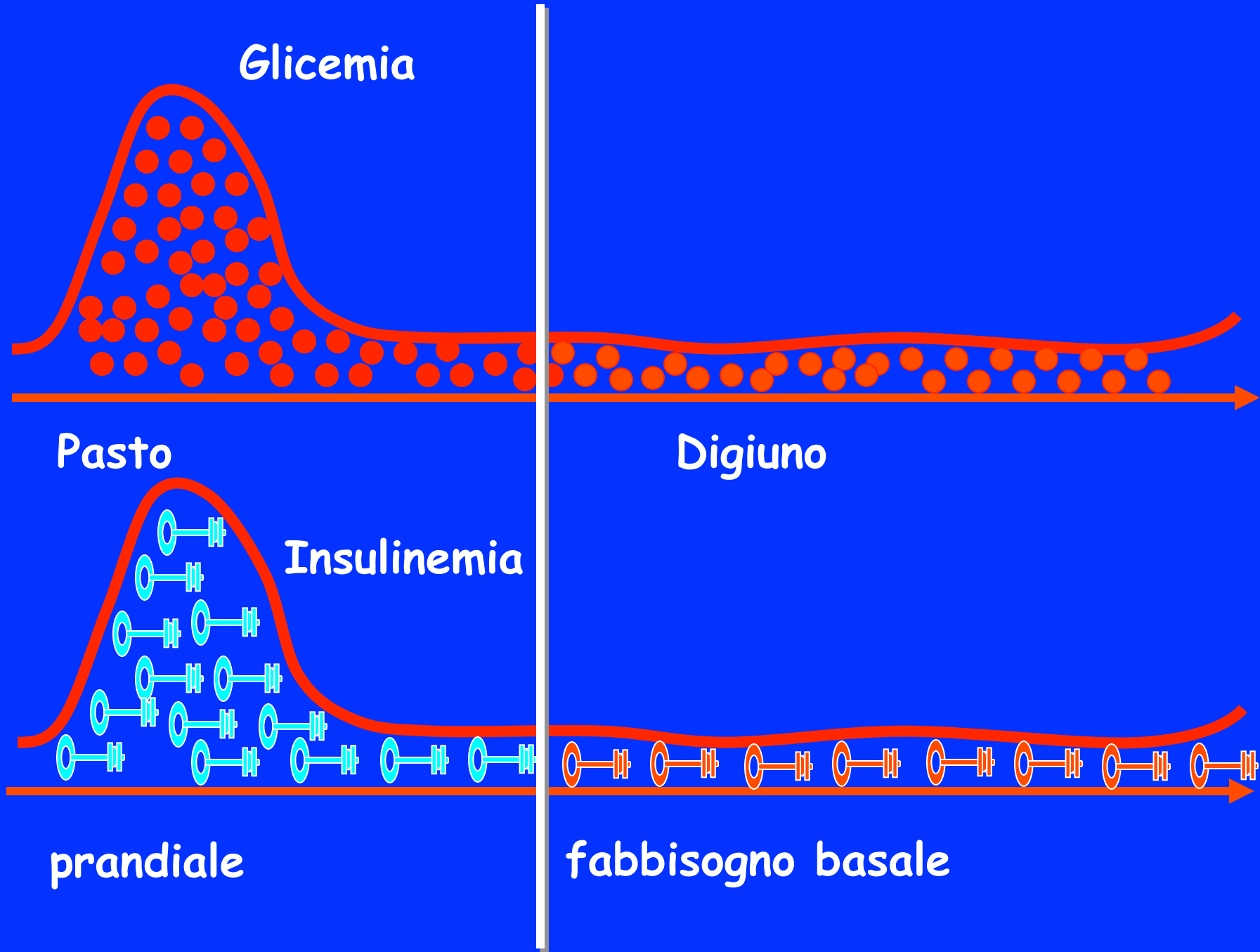


Fegato

Glicemia

Pasto

Digiuno



Glicemia

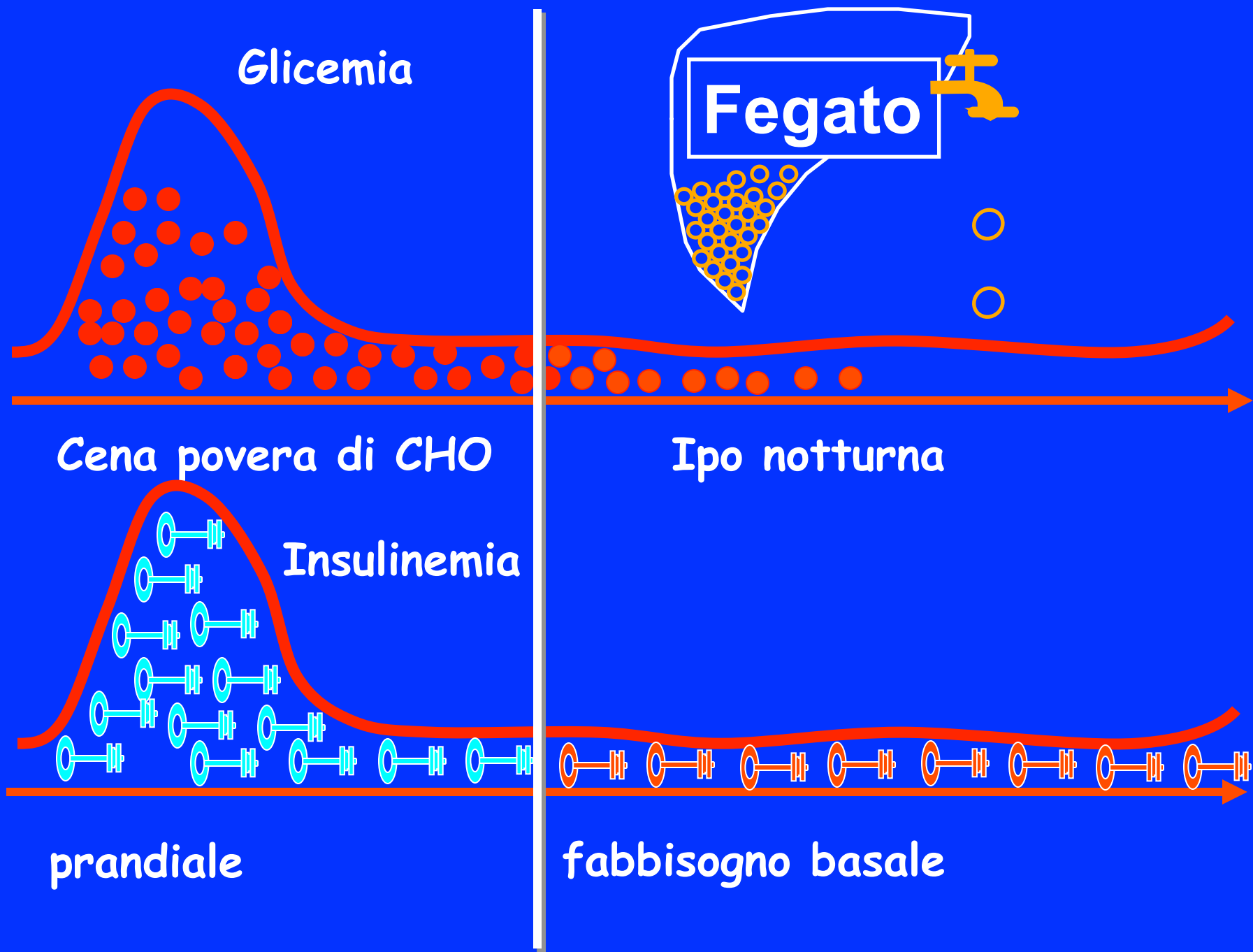
Pasto

Digiuno

Insulinemia

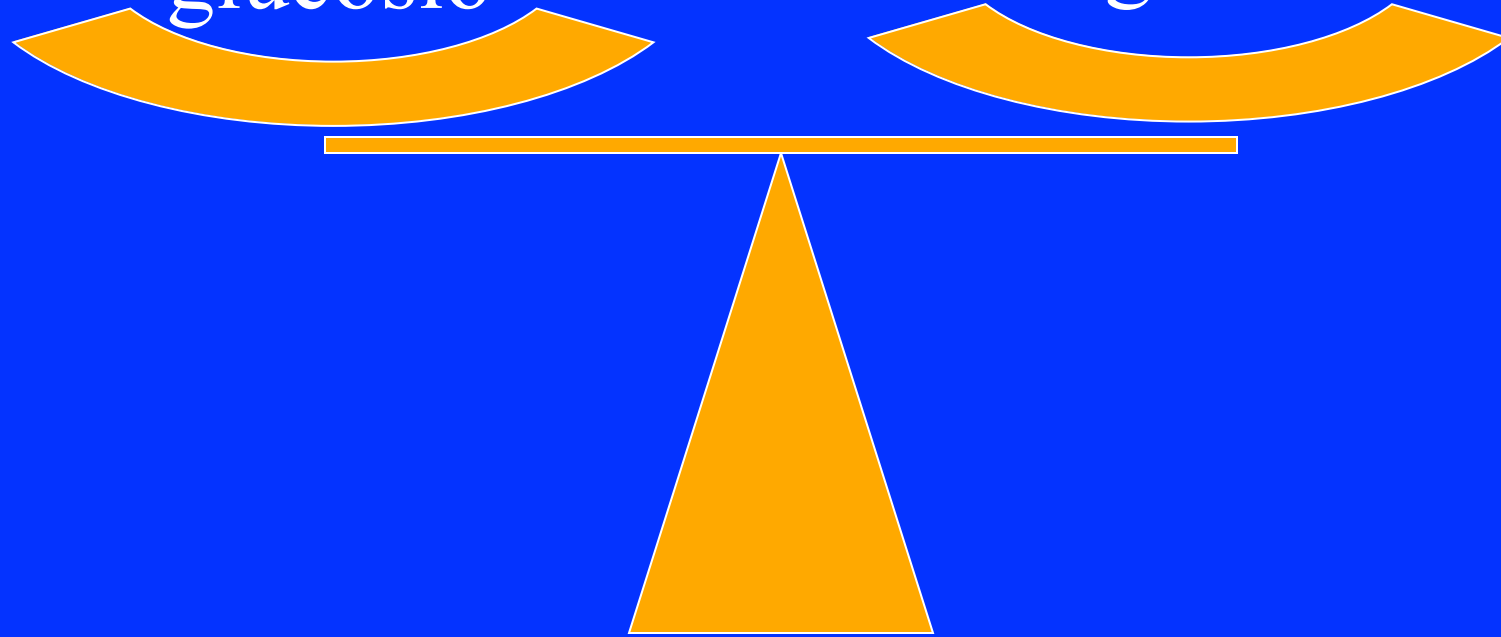
prandiale

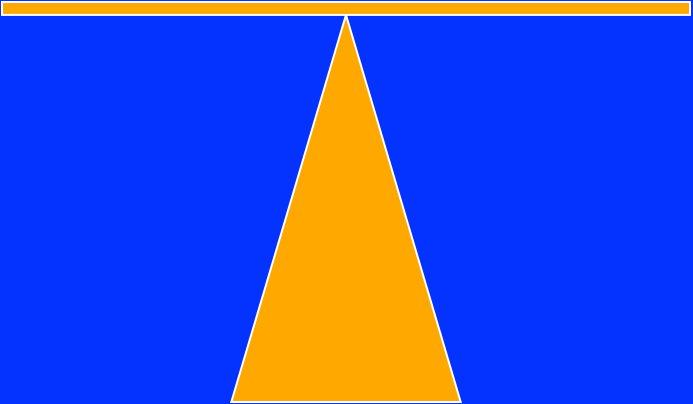
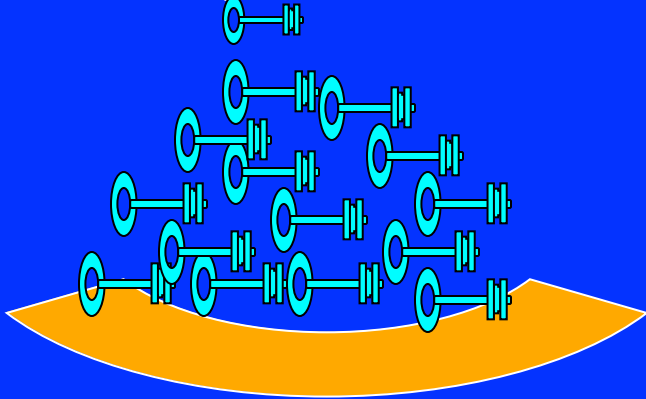
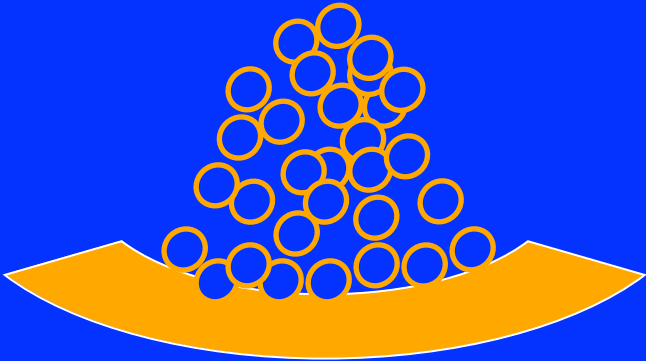
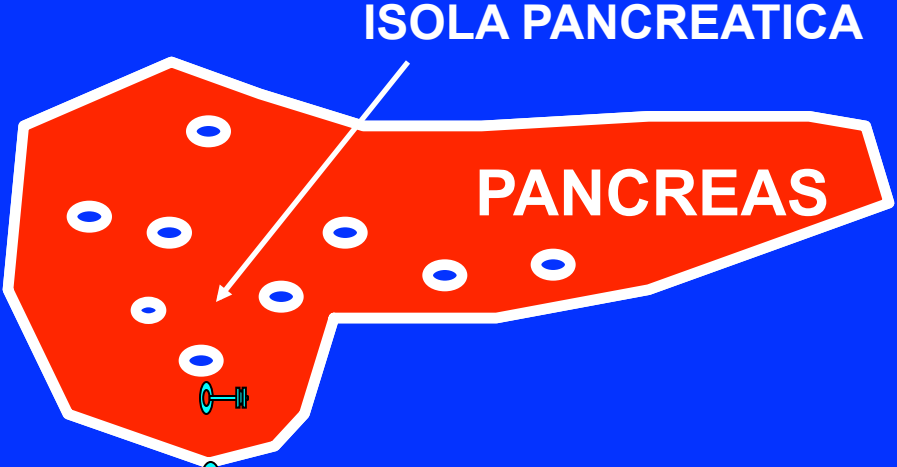
fabbisogno basale



Produzione
epatica di
glucosio

Utilizzazione
del glucosio





Attività fisica

Catecolamine,
Glucagone,
GH, Cortisolo

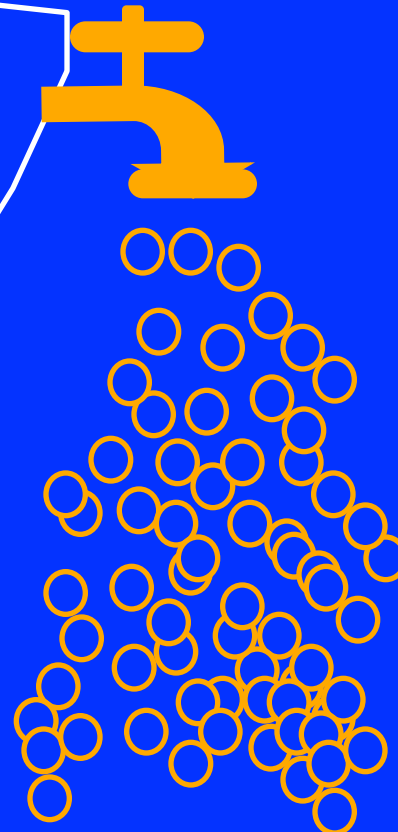
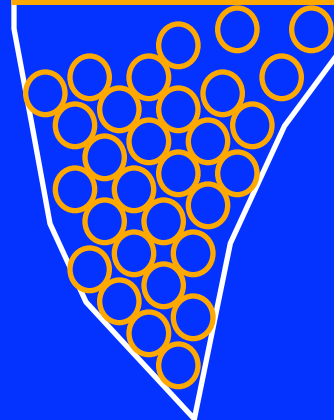


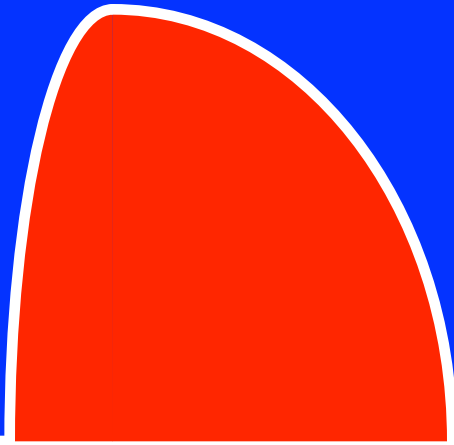
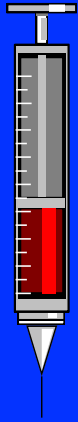
Insulina



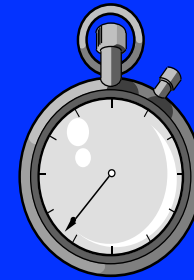
Fegato

Glicogeno
epatico

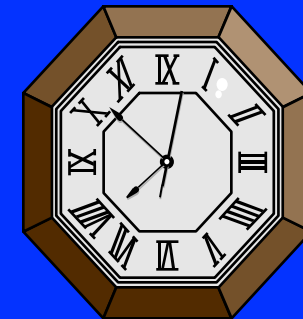


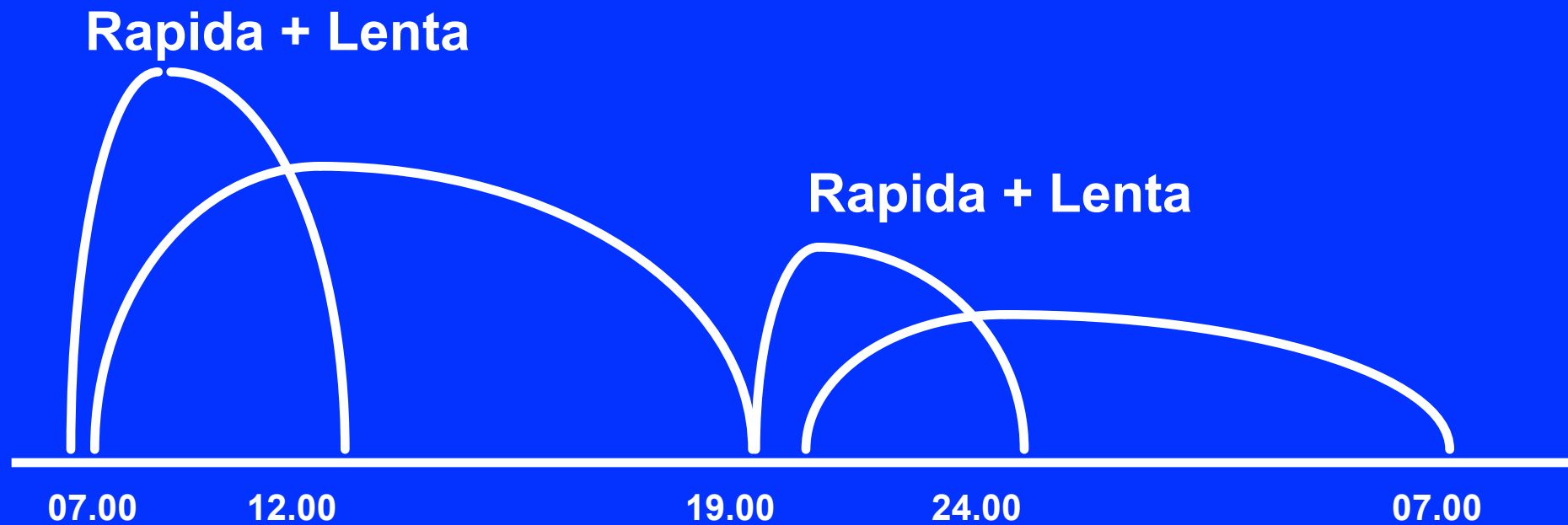


Insulina Rapida
inizio azione: 1/2 ora
durata: 6 ore

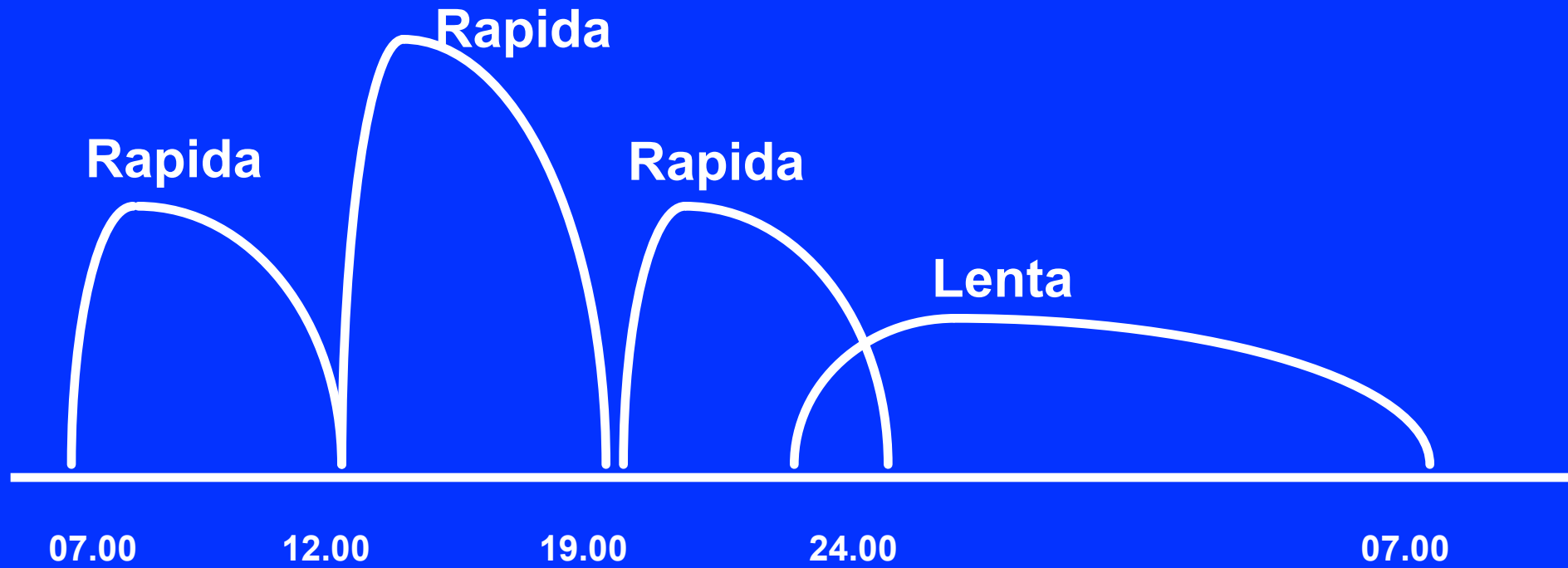


Insulina Lenta
inizio azione: 2-3 ore
durata: 12 ore

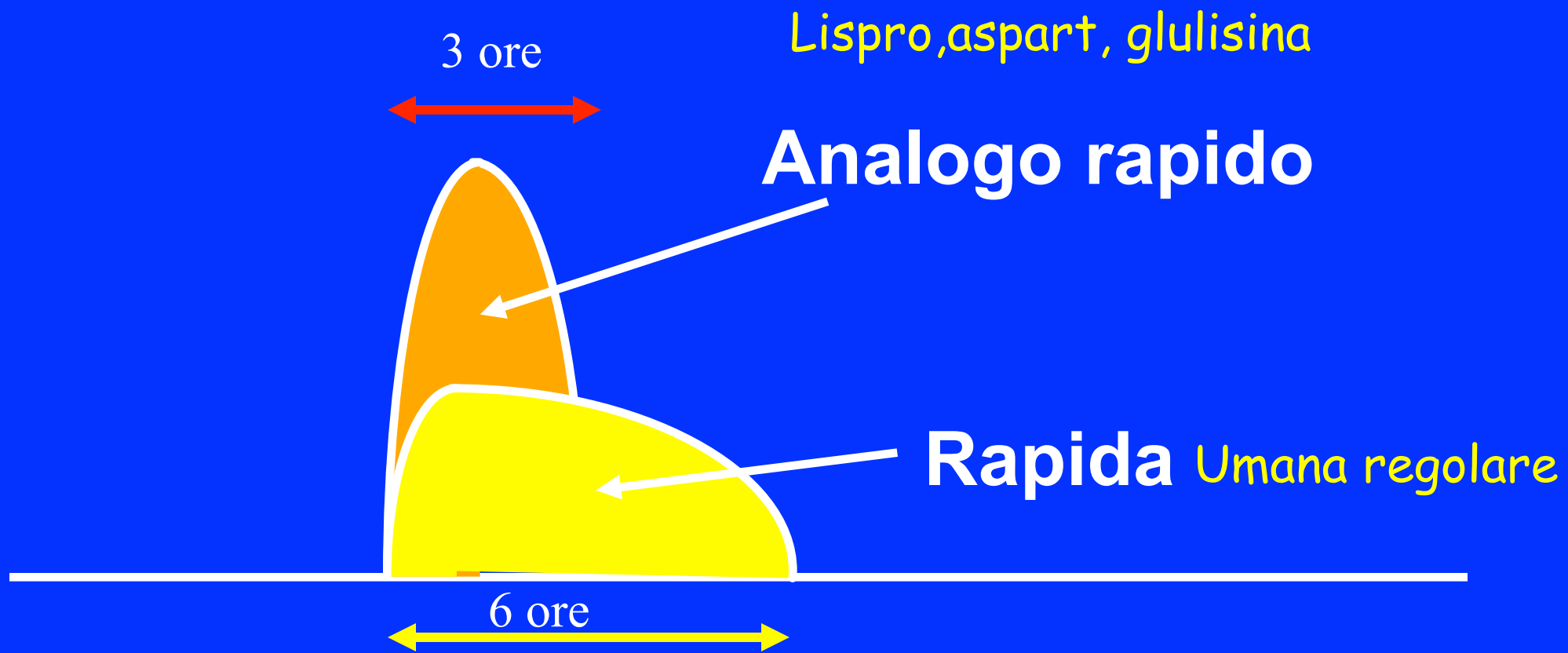


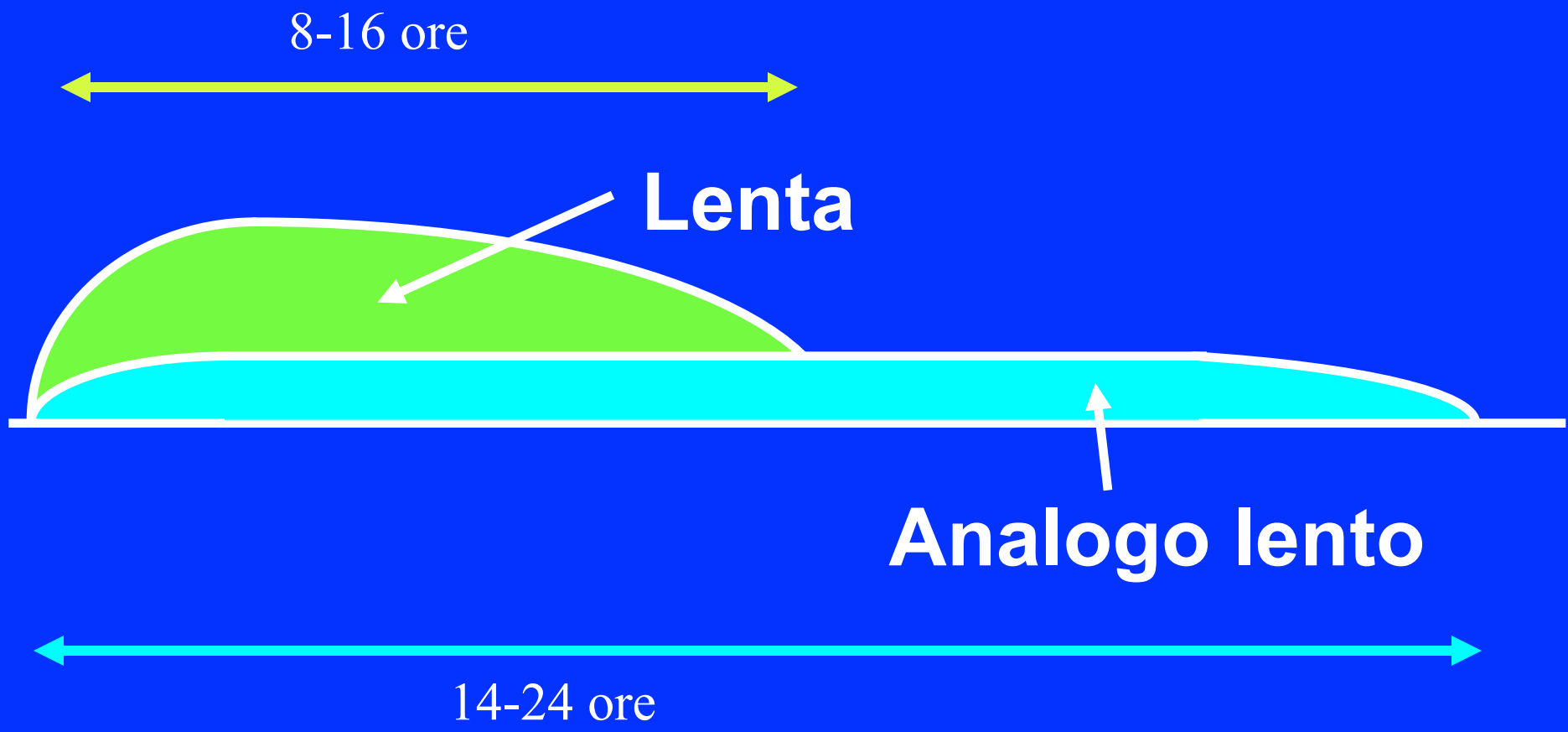


2 somministrazioni: miscela (Rapida + Lenta)



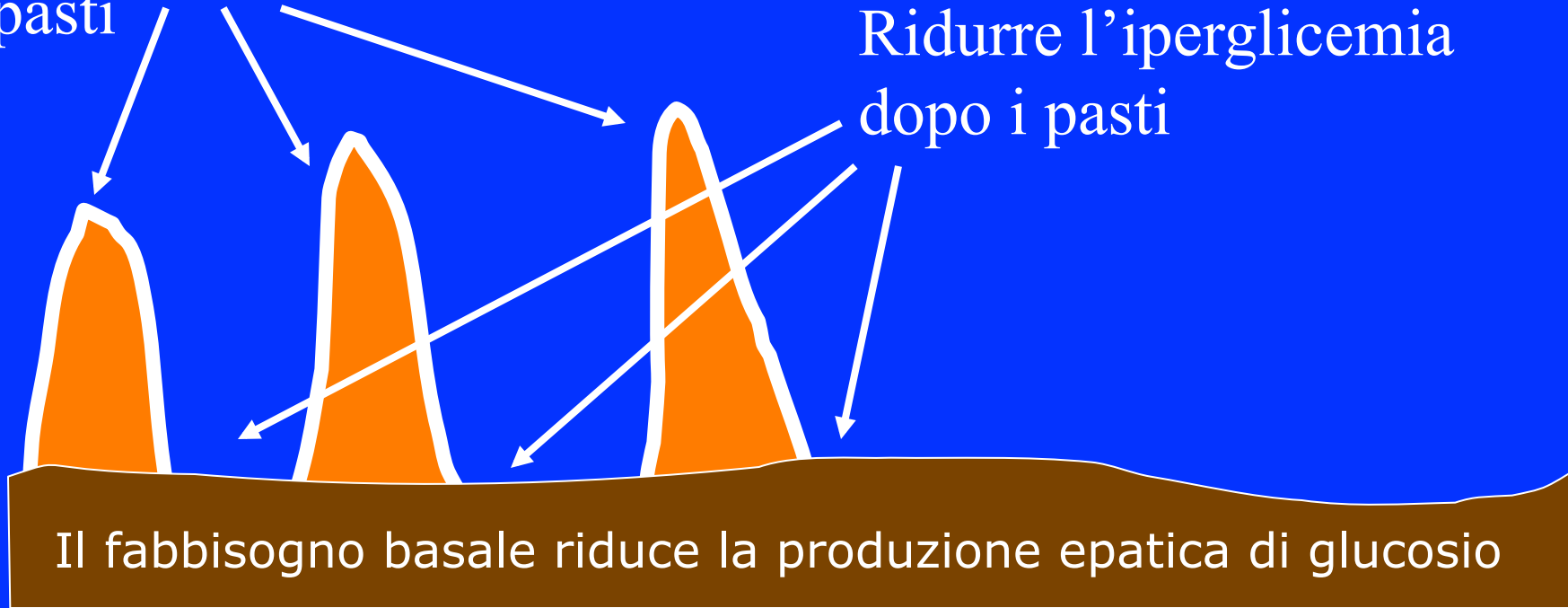
4 somministrazioni: Terapia ottimizzata



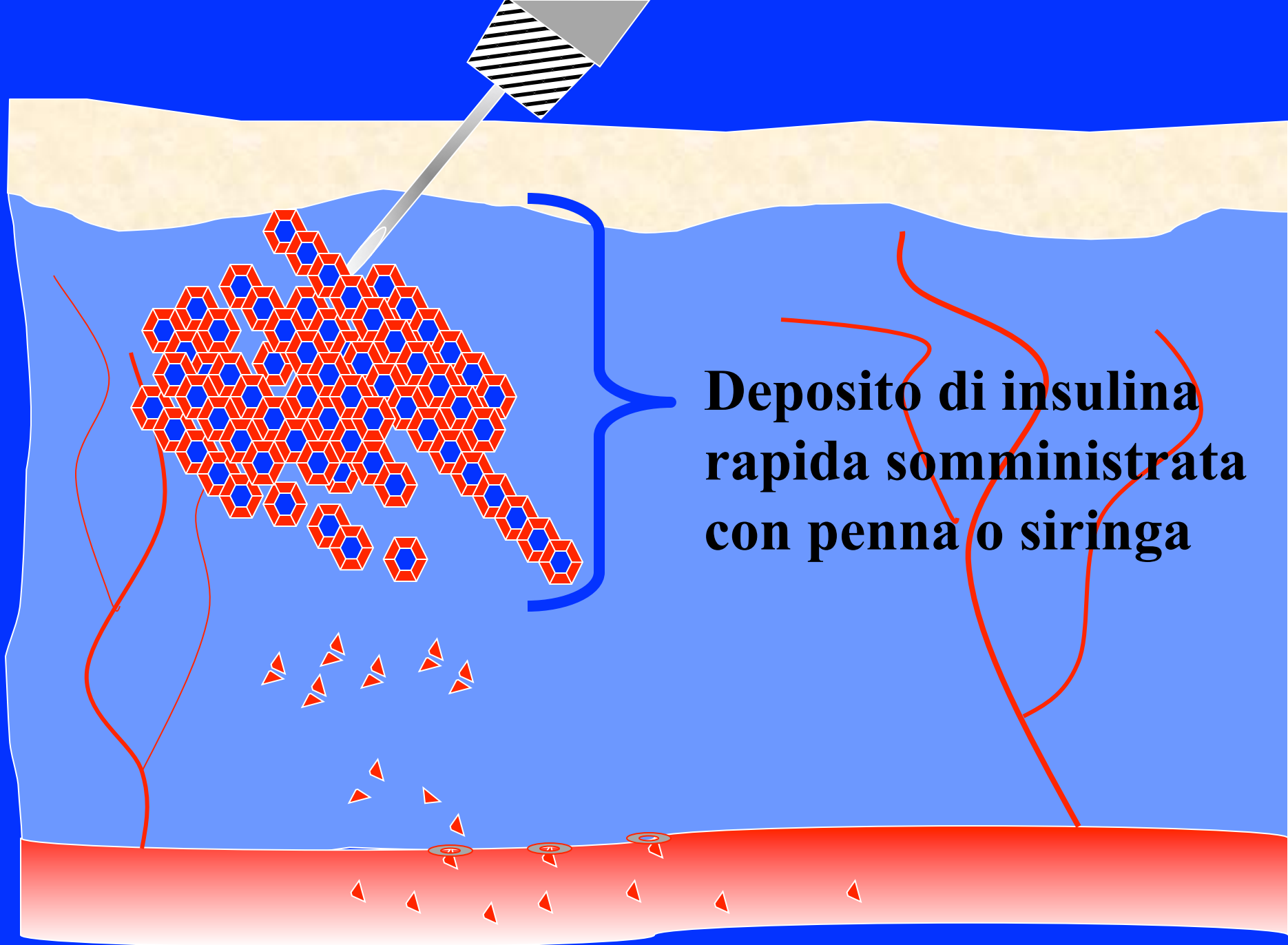


Ridurre l'aumento rapido
ai pasti

Ridurre l'iperglicemia
dopo i pasti



Terapia basale-bolo

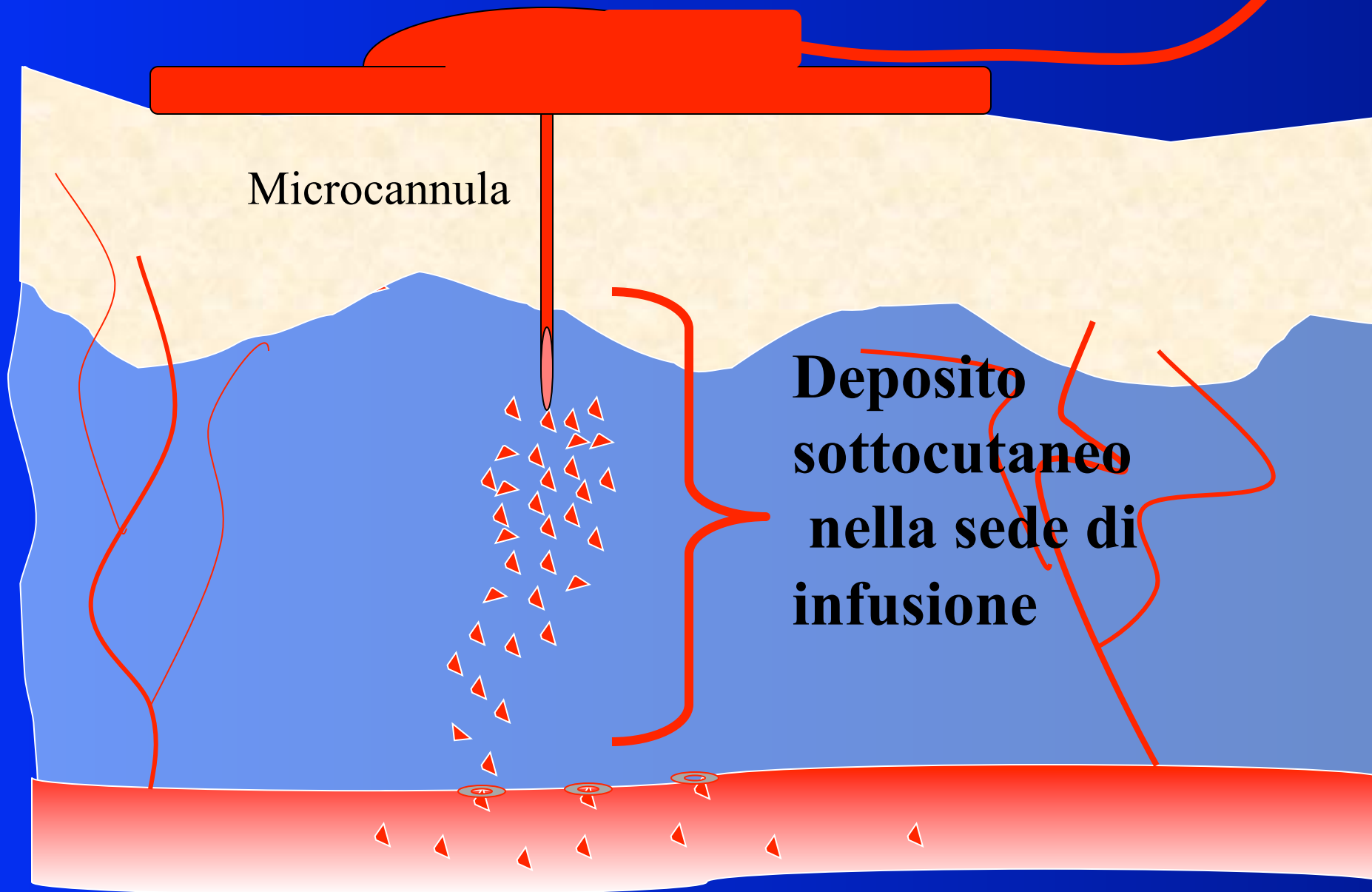


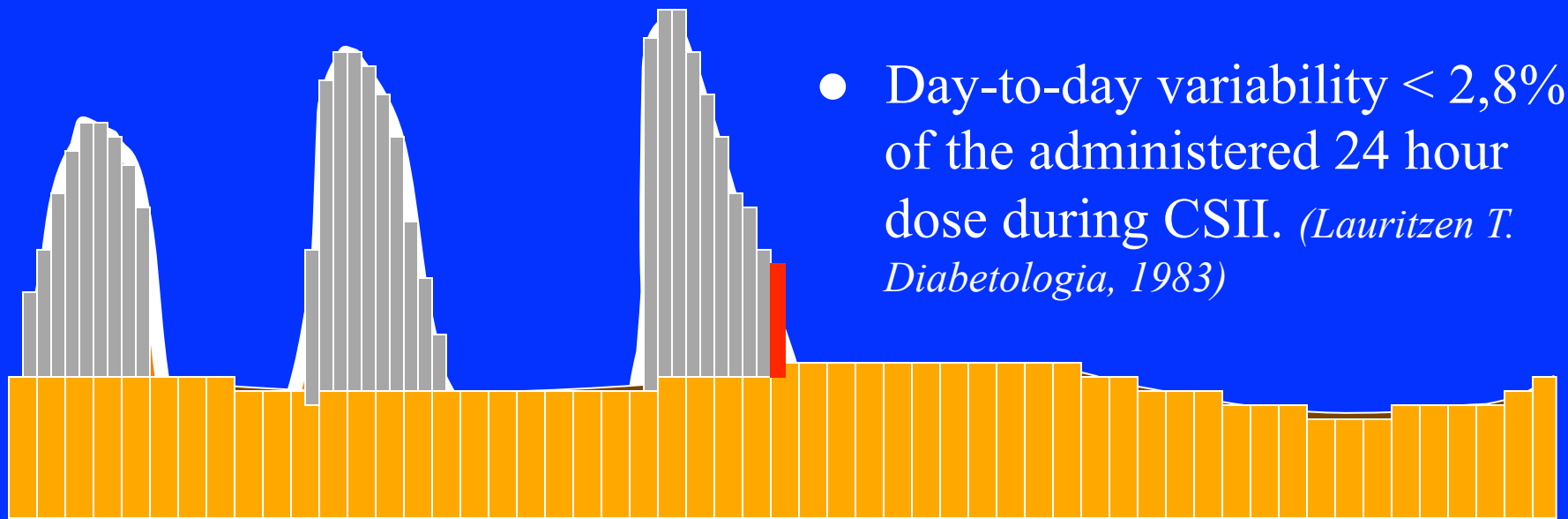
**Deposito di insulina
rapida somministrata
con penna o siringa**

Catetere

Microcannula

**Deposito
sottocutaneo
nella sede di
infusione**





La microinfusione ha il vantaggio di poter variare il fabbisogno basale



Domande



Un'ora con AMD-SID-SIEDP



Seguici su Facebook

Associazione Medici Diabetologi AMD

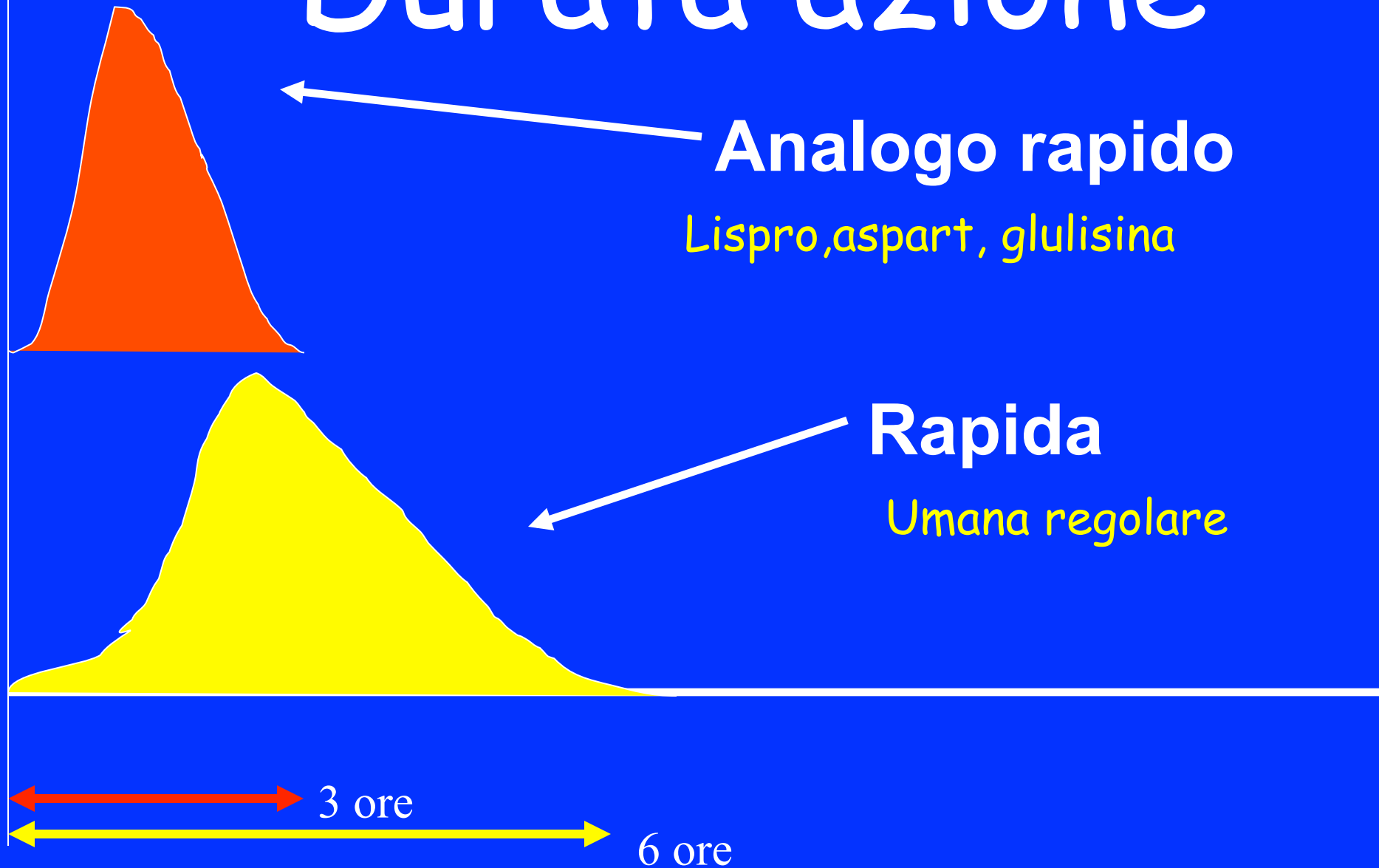
Fondazione Diabete Ricerca Onlus

SIEDP Società Italiana di Endocrinologia e Diabetologia Pediatrica

Supporto tecnologico



Durata azione



Analogo rapido
10 minuti

Lispro, aspart, glulisina

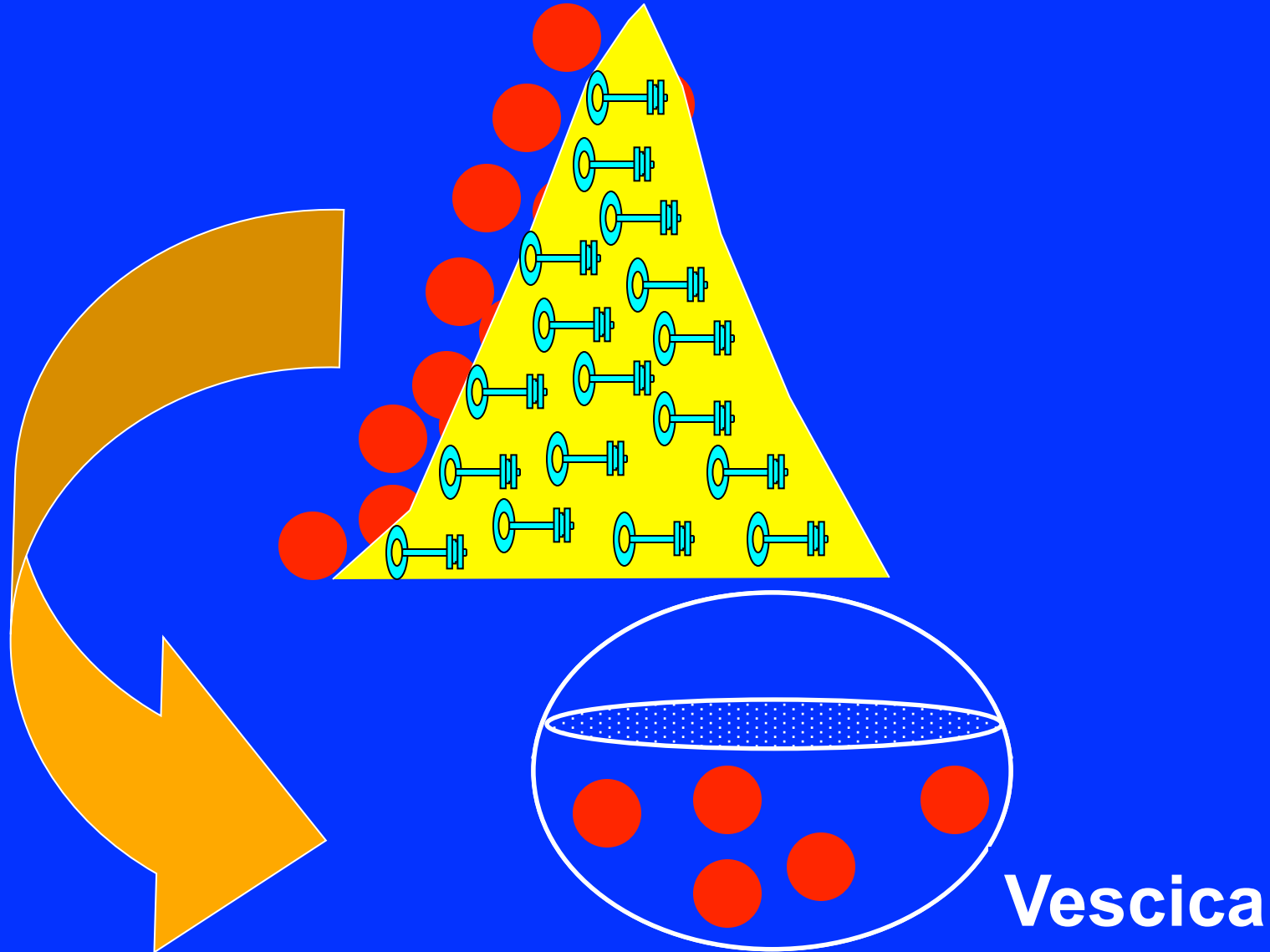
Rapida
20 – 40 minuti

Umana regolare

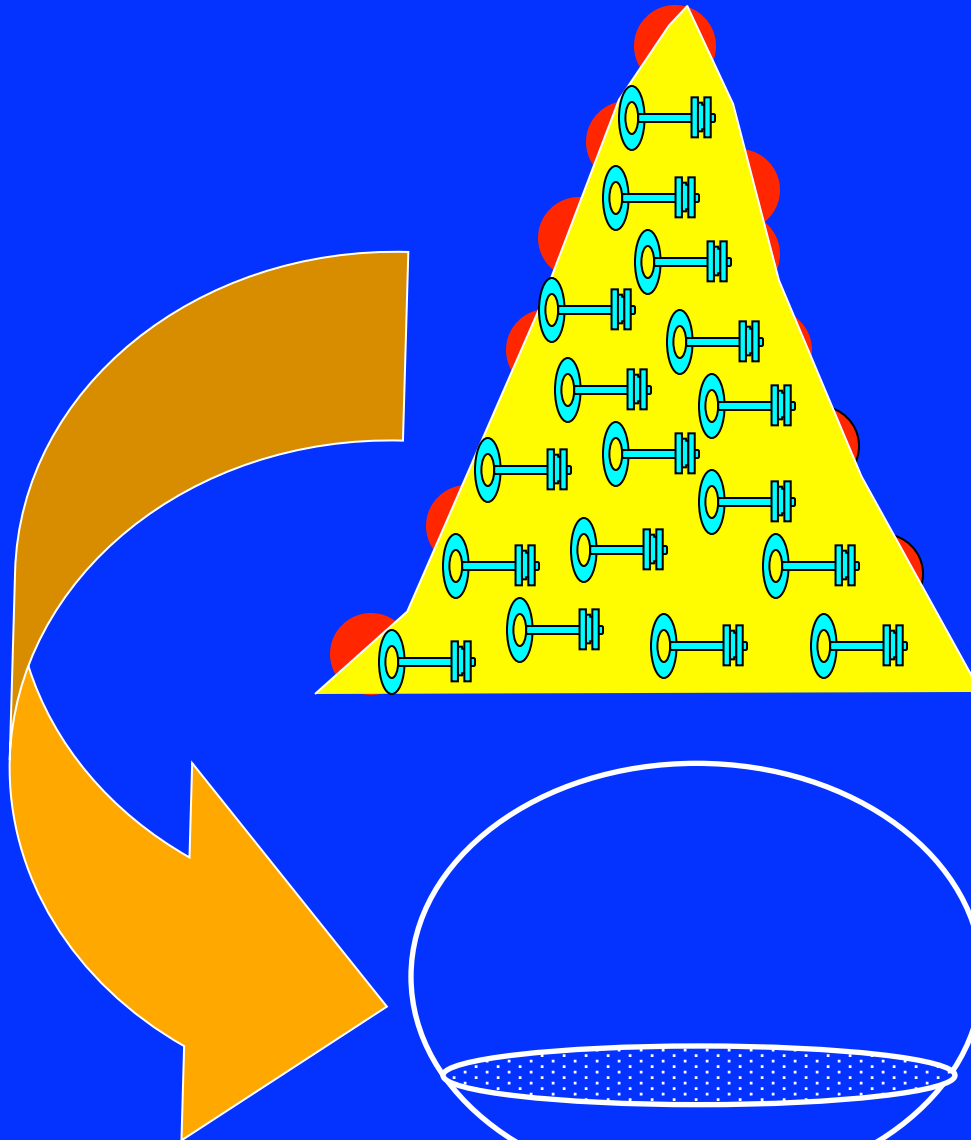
Inizio azione



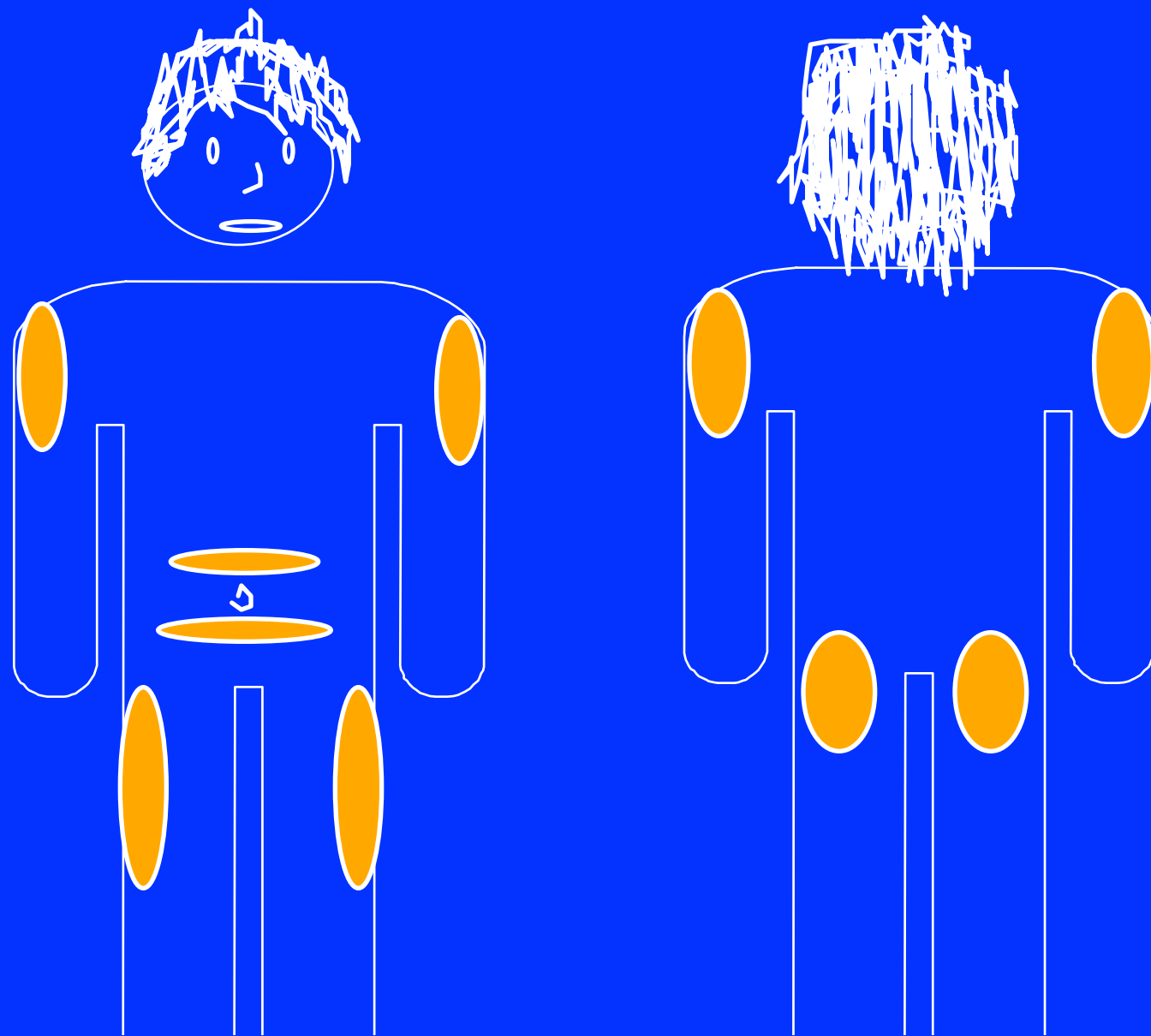
ultrarapida



ultrarapida



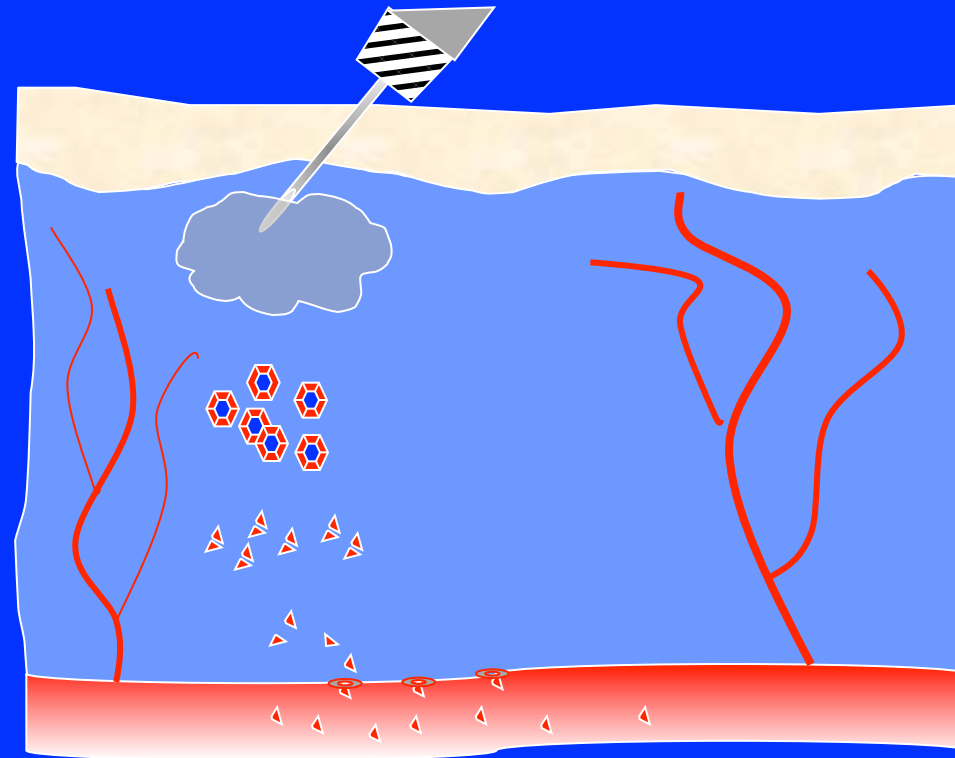
Vescica

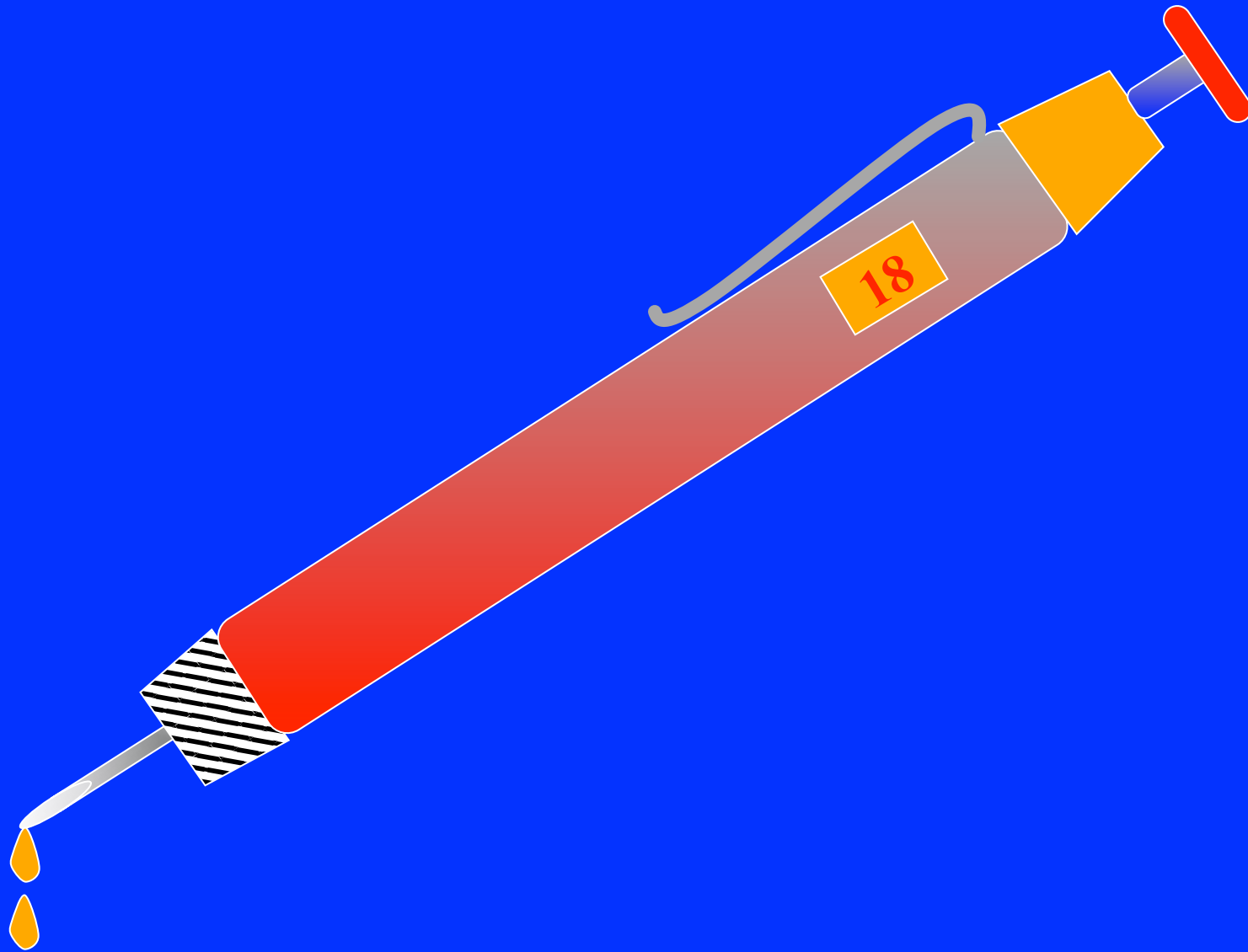


Zone di iniezione dell' insulina

Injection site factors influencing insulin absorption

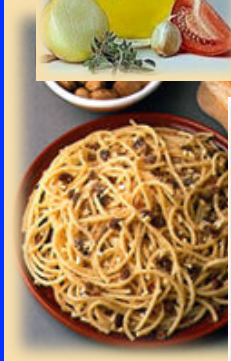
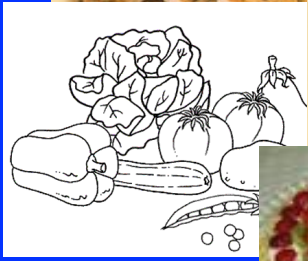
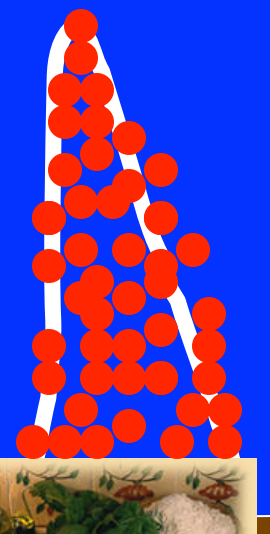
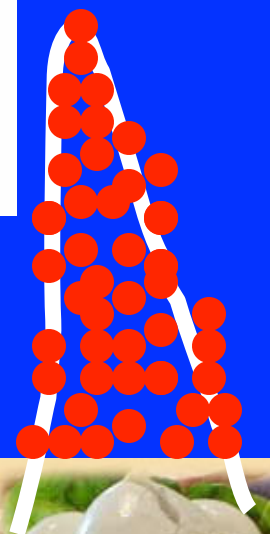
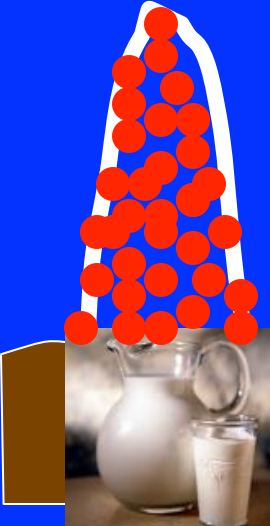
- Sede d'iniezione
- profondità
- lipoipertrofia
- Flusso sanguigno
 - Temperatura
 - Esercizio
 - Ipoglicemia
 - ketoacidosi



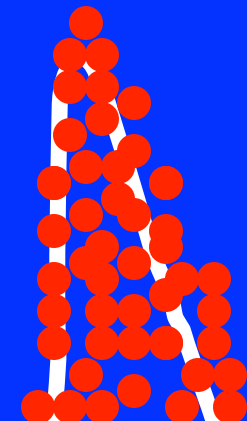
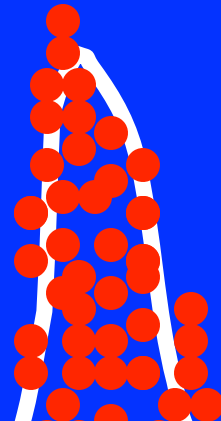
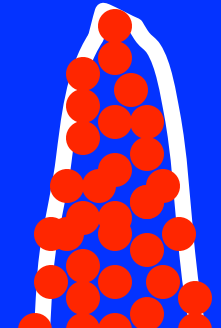


Principali tappe cognitive e di manualità nella gestione del diabete

- Dai 5 anni Riconoscimento delle ipoglicemie
- Dai 6-7 anni Esecuzione di glicemia e glicosuria
- Dai 6-8 anni Iniezione dell'insulina con penna
- Dai 10-11 anni Adeguatezza delle dosi di insulina
- Dai 13 anni Gestione di terapia insulinica, alimentazione ed attività fisica



Cibi contenenti carboidrati



Colazione:
45 grammi

Pranzo:
90 grammi

Cena:
75 grammi



Insulina:
UR 3 unità



Insulina:
UR 6 unità



Insulina:
UR 5 unità

TOTALE INSULINA UR: 14 UNITA'

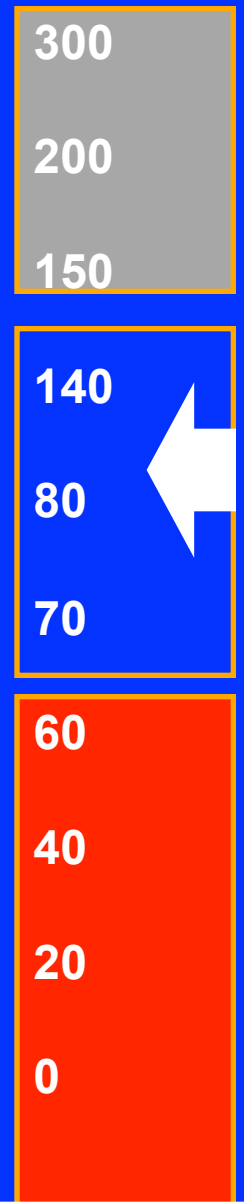
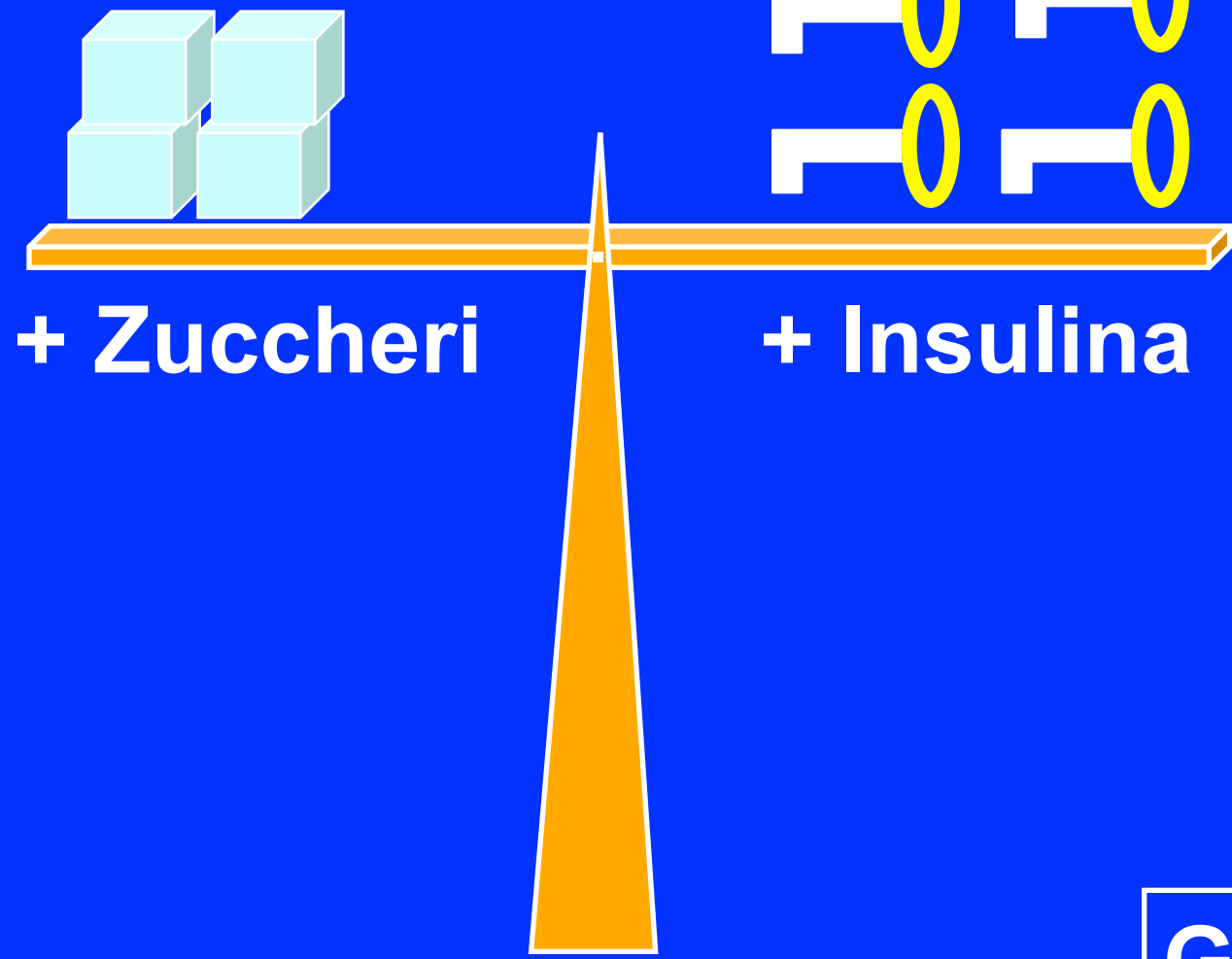
TOTALE CARBOIDRATI: 210 GRAMMI

=

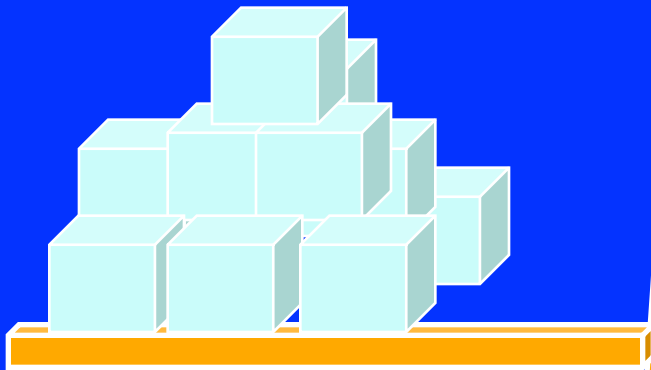
1 Unità ogni
15 grammi di CHO

Esempio

Contenuto in CHO del pasto = 85 g	Glicemia preprandiale = 297 mg/dl	Bolo d'insulina
Rapporto Insulina:CHO 1:15 g	Target 120 mg/dl; fattore di Sensibilità Insulinica: 1:50 mg	
Dose per i CHO: 85:15g = 5,6	Glicemia da correggere: (297-120) = 177 mg	
	Correzione per l'iperglicemia: 177:50 = 3,5	
Dose per i CHO (U):	Dose per l'iperglicemia	
5,6 U	3,5	9,1 U



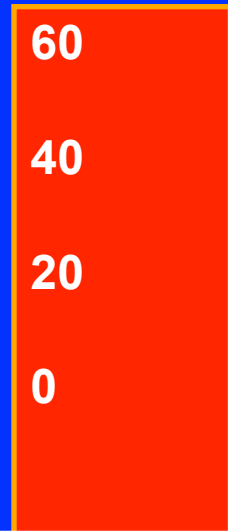
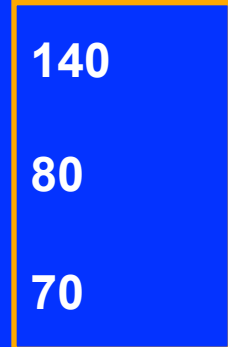
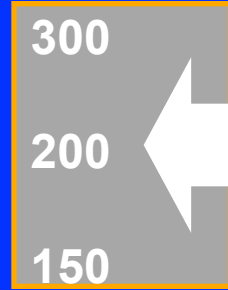
Glicemia



Molti zuccheri



**Iperglicemia
poca insulina**

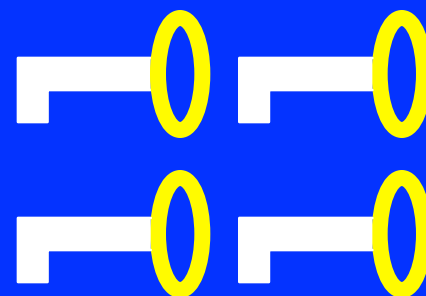


Iperglicemia

Pochi Zuccheri



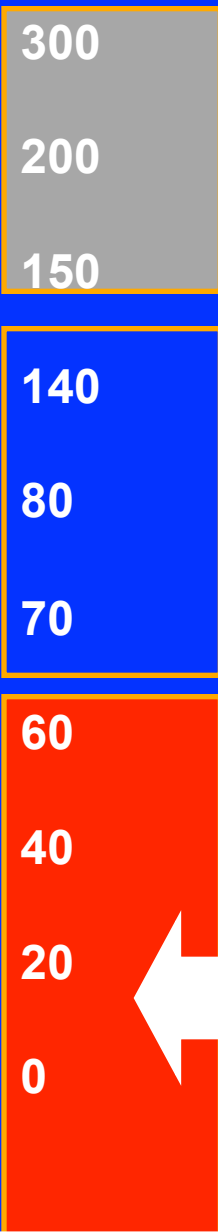
**Molta
insulina**

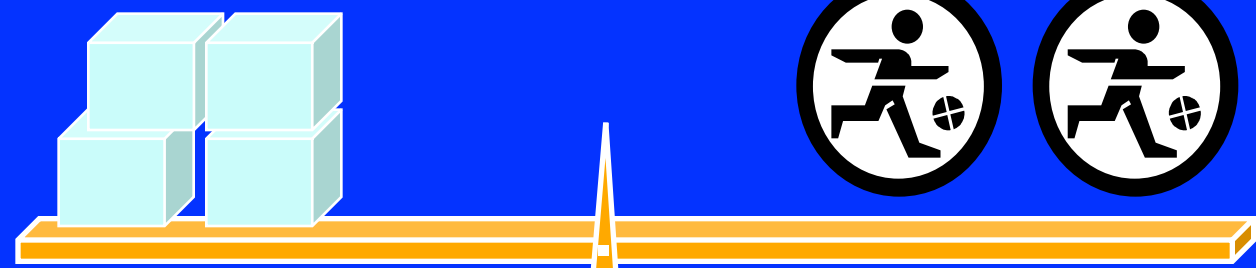


Ipoglicemia



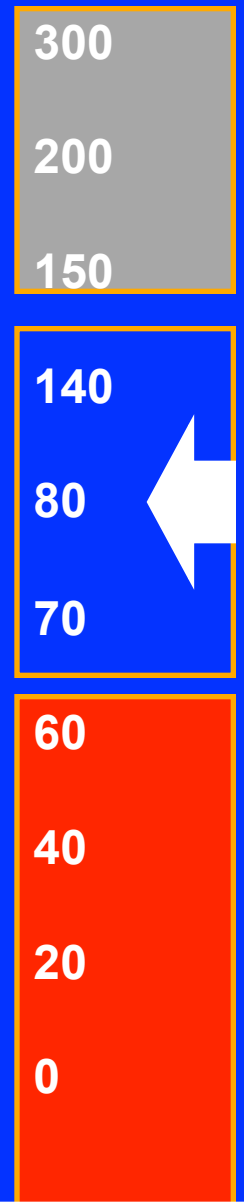
Ipoglicemia





+ Zuccheri

**Insulina
+ attività fisica**

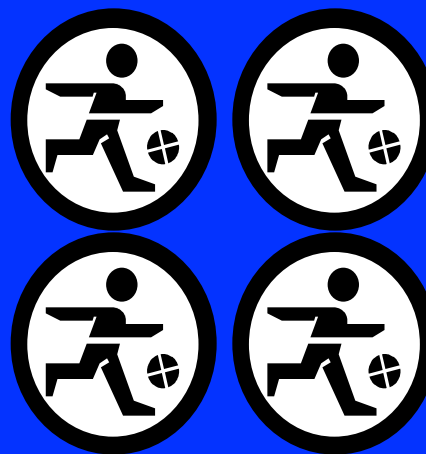


Glicemia

Pochi
Zuccheri

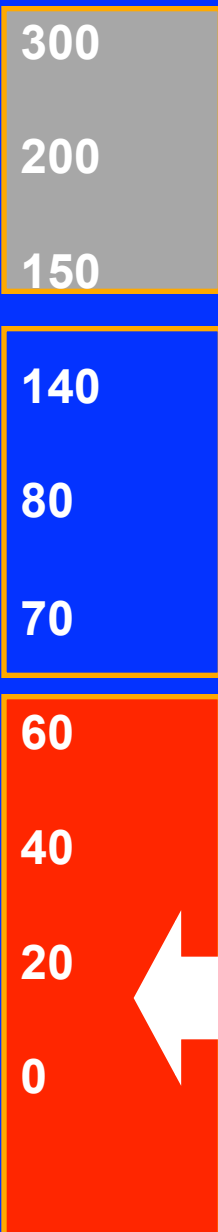


Troppa attività
fisica



Ipoglicemia

Iperglicemia





GRAZIE!



Un'ora con AMD-SID-SIEDP



Seguici su Facebook

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Fondazione Diabete Ricerca Onlus

SIEDP Società Italiana di Endocrinologia e Diabetologia Pediatrica

Supporto tecnologico





Domande



Un'ora con AMD-SID-SIEDP



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Supporto tecnologico

