

Valutazione delle curve da carico

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Bilancio energetico dell'organismo

- Catabolismo

- Palmitato (16C): **130 ATP**
 - $N \cdot 17/2 - 6$
- Margarico (17C): **123 ATP**
 - $(N-3) \cdot 17/2 + 4$
- Glucosio: **38 ATP**

- Anabolismo

- Palmitato (16C): **15 ATP**
- Glucosio: **6 ATP**

Controllo omeostatico della glicemia

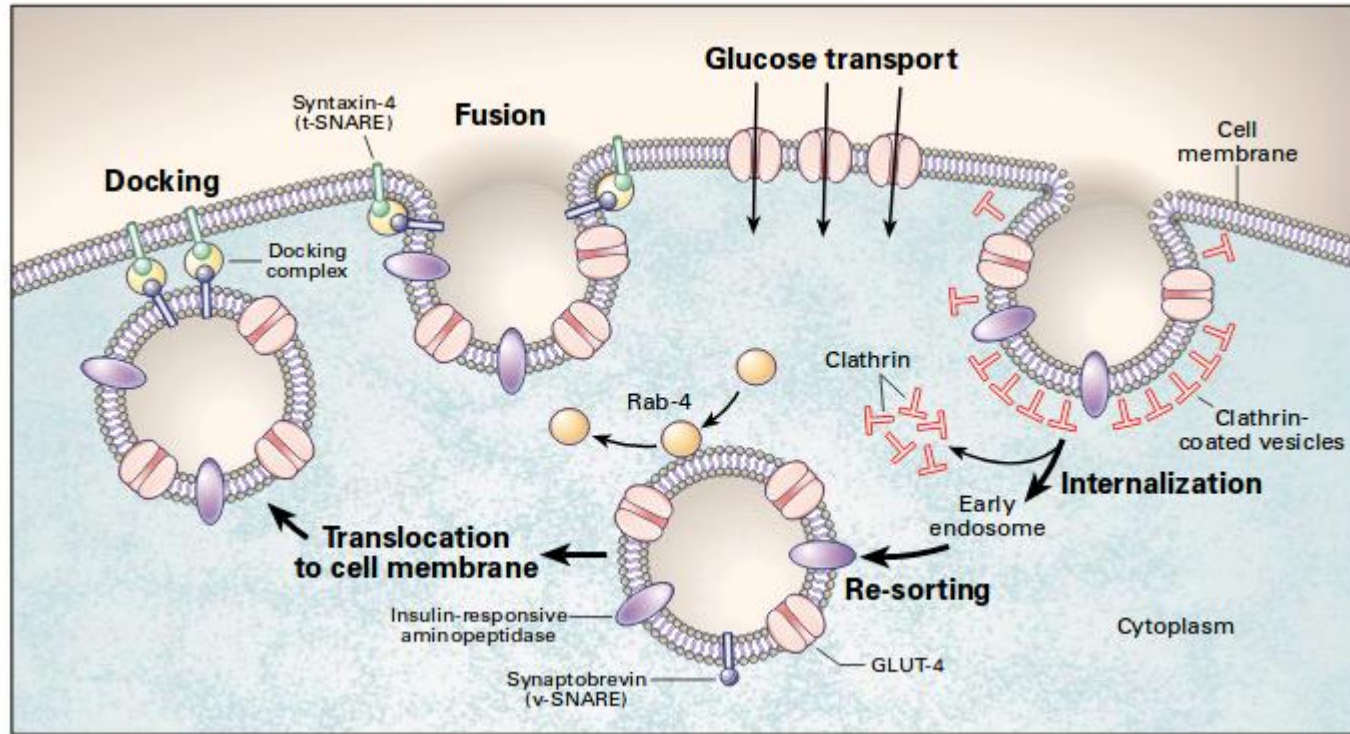
- Ormoni Ipoglicemizzanti

- Insulina

- Ormoni Iperglicemizzanti

- Glucagone
- GH
- Adrenalina, Noradrenalina
- Cortisolo, Progesterone, Estrogeni
- Ormoni tiroidei

Trasportatore GLUT-4



Criteri secondo l'OMS: OGTT

Criteri secondo l'OMS - Interpretazione dell'OGTT

	Glicemia: <u>mmol/l</u> (mg/dl)			
Minuti	Normale	Alterata glicemia a digiuno (<u>IFG</u>)	Ridotta tolleranza al glucosio (<u>IGT</u>)	<u>Dabete Mellito</u>
0	<6.0 (<100)	5.6 - 7.0 (100 - 126)	<7.0 (<126)	≥7.0 (≥126)
120	<7.8 (<140)		≥7.8 - <11.1 (≥140 - <200)	≥11.1 (≥200)

1mg/dL=0.0555mmol/L

14384 OGTT

Joseph R. Kraft. Diabetes Epidemic & You. Trafford Publishing 2008

	Normale (n=9598)	IGT (n=2775)	DM (n=2011)
Glicemia a digiuno			
<110 mg/dL	99%	84%	40%
<100 mg/dL	93%	60%	20%
<90 mg/dL	71%	32%	13%
<80 mg/dL	32%	12%	4%
<70 mg/dL	9%	9%	2%
<60 mg/dL	2%	2%	<1%

14384 OGTT

Joseph R. Kraft. Diabetes Epidemic & You. Trafford Publishing 2008

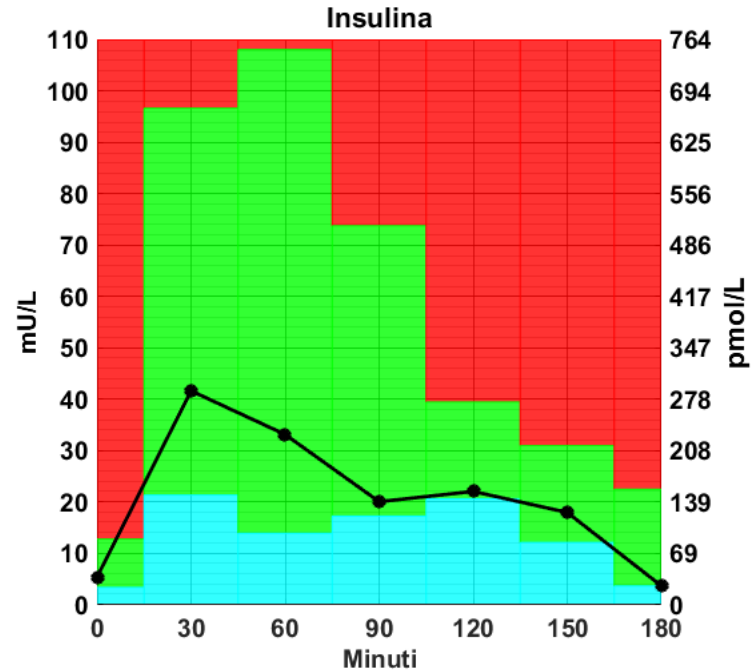
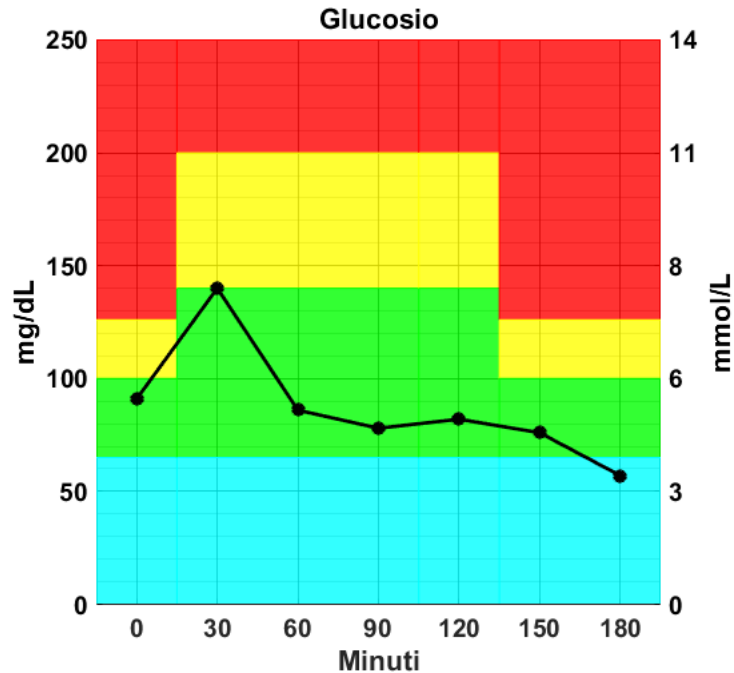
	Normale (n=9598)	IGT (n=2775)	DM (n=2011)
Insulina a digiuno			
0-10 mU/L	53%	43%	33%
11-15 mU/L	23%	19%	19%
16-20 mU/L	11%	14%	14%
21-30 mU/L	8%	14%	18%
>30 mU/L	5%	10%	16%

Pattern Insulinemici secondo Kraft

Pattern	Insulina a digiuno	Picco Insulinico	$I_{120} + I_{180}$	
I	0-30 mU/L	30-60 minuti	<60 mU/L	Euinsulinemia
II	0-30 mU/L	30-60 minuti	≥ 60 mU/L	Insulino-resistenza
III	0-30 mU/L	120-180 minuti	≥ 60 mU/L	Insulino-resistenza
IV	>30 mU/L	120-180 minuti	≥ 60 mU/L	Diabete Tipo II
V	0-30 mU/L	30-60 minuti	≤ 25 mU/L	Diabete Tipo I

Caso 1 – Euglicemico – Pattern I

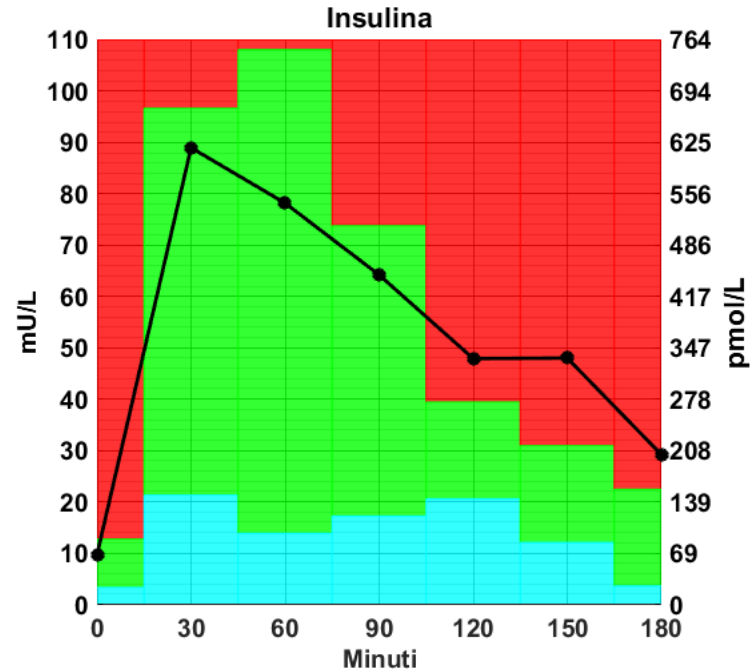
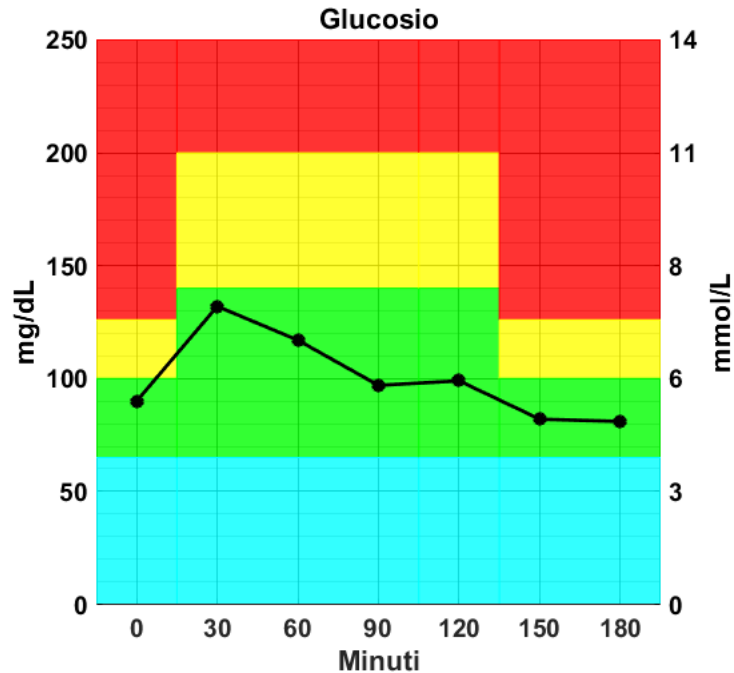
Donna, 52 anni, peso 60 Kg, Altezza 157 cm, BMI 25.255 (Sovrappeso).



$G_0=91$ mg/dL – $G_{120}=82$ mg/dL – $I_0=5.3$ mU/L – $Tri_0=42$ mg/dL
HOMA=1.19 – QUICKI=0.3727 – McAuley=10.96

Caso 2 – Euglicemico – Pattern II

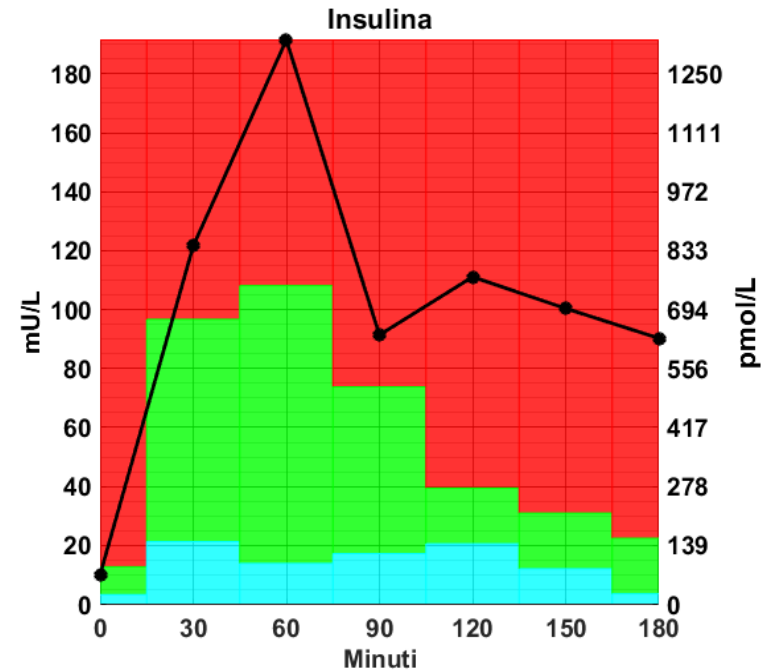
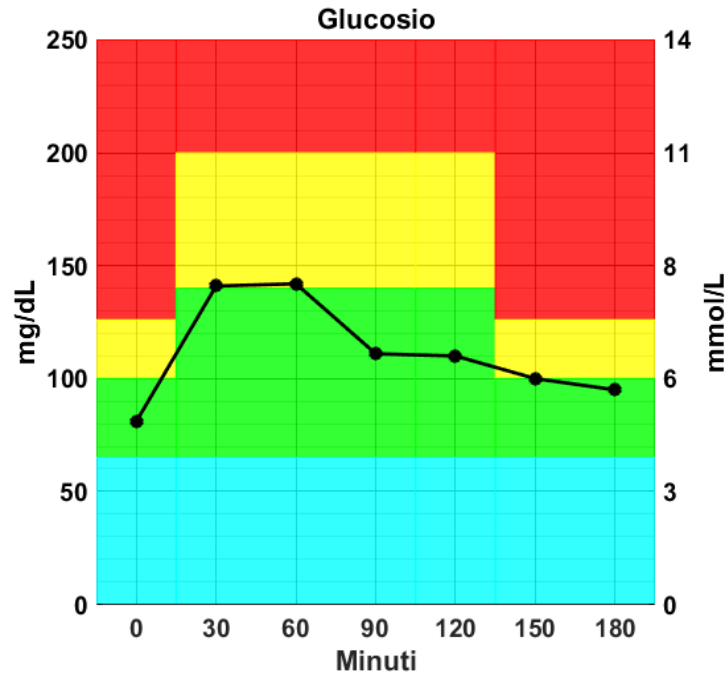
Donna, 39 anni, peso 75 Kg, Altezza 161 cm, BMI 29.644
(Sovrappeso).



$G_0=90$ mg/dL – $G_{120}=99$ mg/dL – $I_0=9.7$ mU/L – $Tri_0=97$ mg/dL
HOMA=2.16 – QUICKI=**0.3400** – McAuley=7.14

Caso 3 – Euglicemico – Pattern II

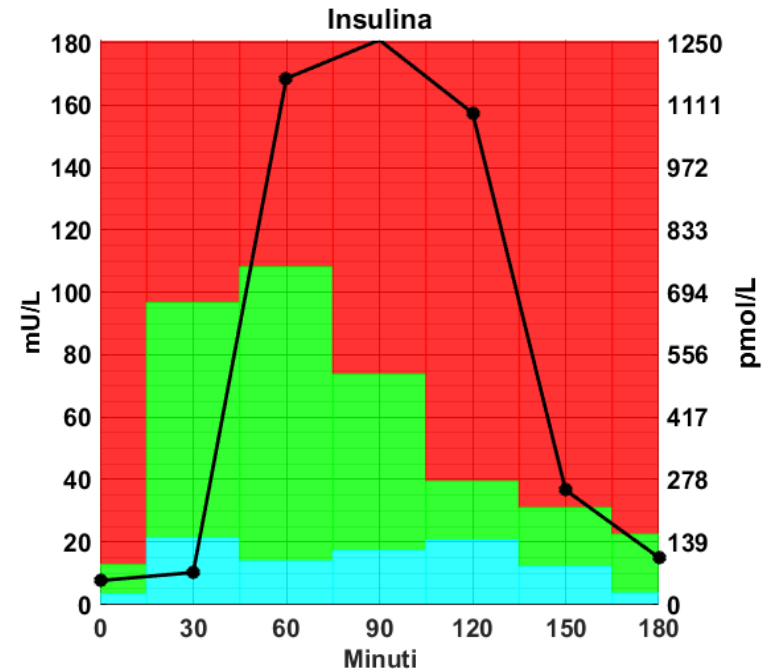
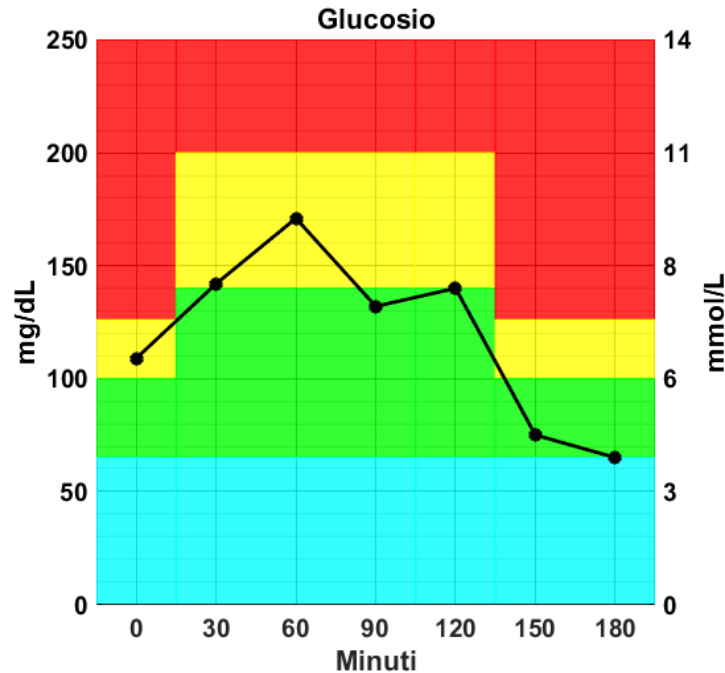
Donna, 32 anni, peso 67 Kg, Altezza 170 cm, BMI 23.115
(Normopeso).



$G_0=81$ mg/dL – $G_{120}=110$ mg/dL – $I_0=10.1$ mU/L – $Tri_0=32$ mg/dL
HOMA=2.02 – QUICKI=0.3433 – McAuley=9.95

Caso 4 – IFG – Pattern III

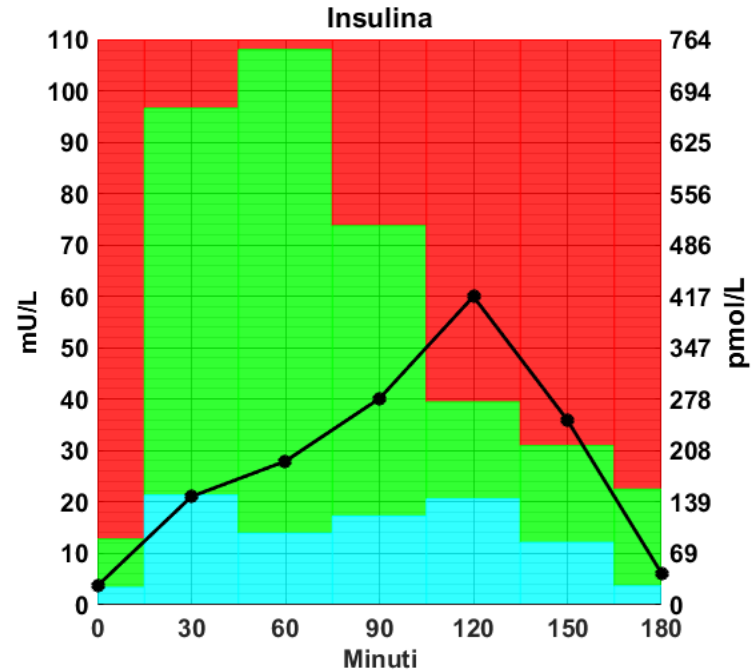
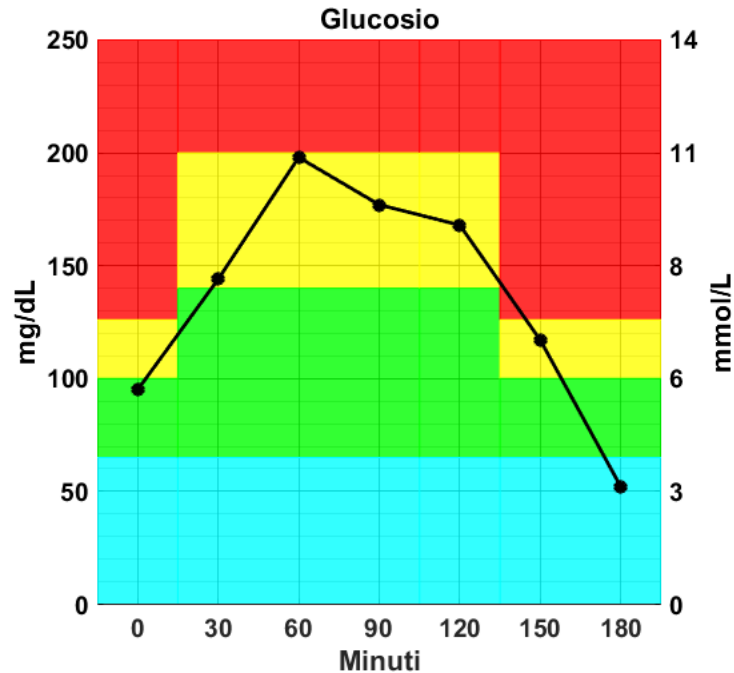
Uomo, 59 anni, peso 110 Kg, Altezza 180 cm, BMI 32.897
(Obesità di I grado).



$G_0 = 109$ mg/dL – $G_{120} = 140$ mg/dL – $I_0 = 7.6$ mU/L – $Tri_0 = 68$ mg/dL
HOMA=2.04 – QUICKI=0.3427 – McAuley=8.53

Caso 5 – IGT – Pattern III

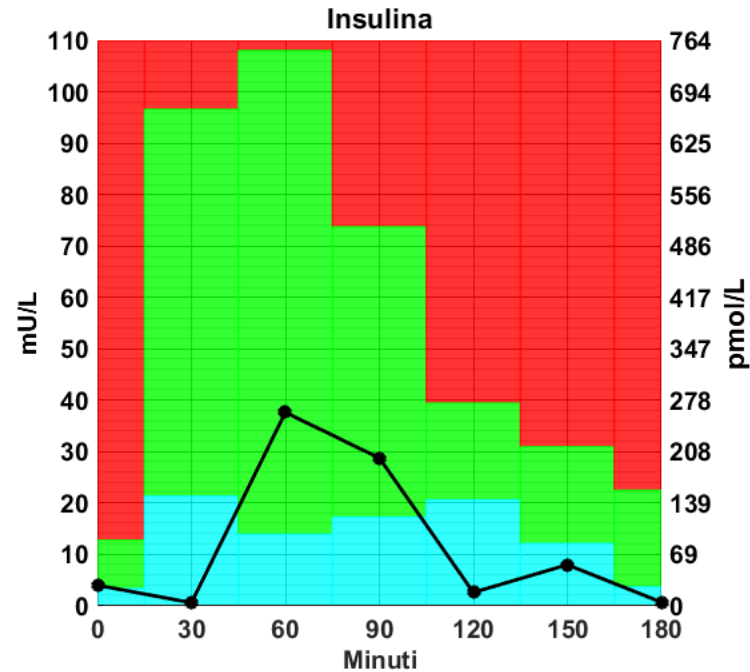
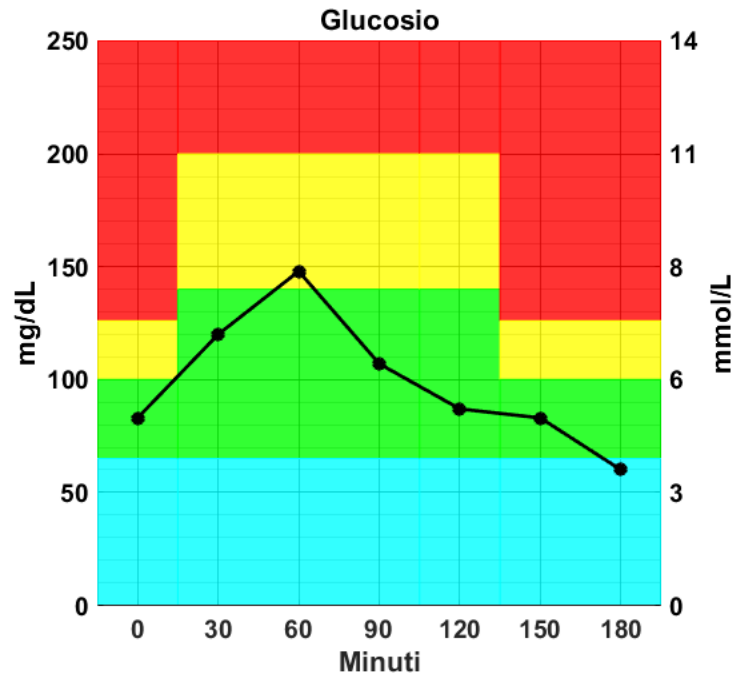
Uomo, 59 anni, peso 110 Kg, Altezza 180 cm, BMI 32.897
(Obesità di I grado).



$G_0=95$ mg/dL – $G_{120}=\mathbf{168}$ mg/dL – $I_0=3.6$ mU/L – $Tri_0=85$ mg/dL
HOMA=0.84 – QUICKI=0.3946 – McAuley=9,81

Caso 6 – Euglicemico – Pattern V

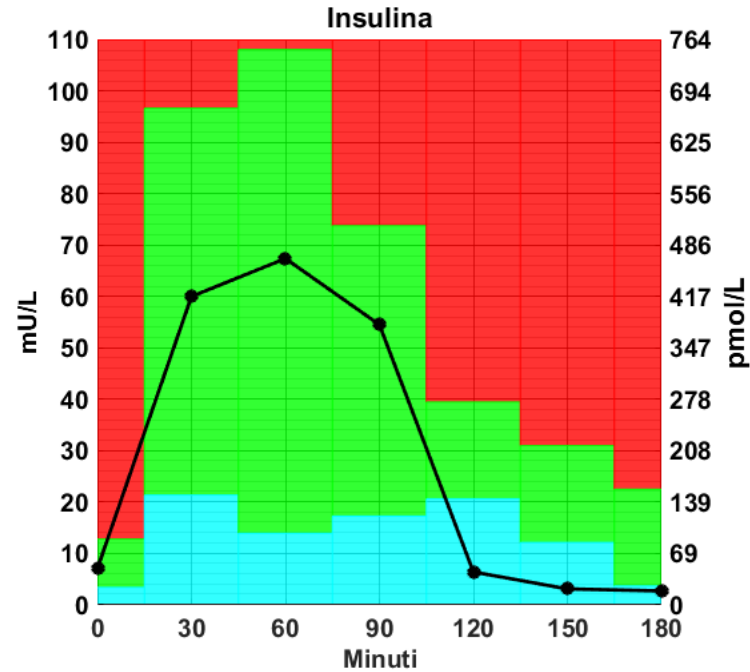
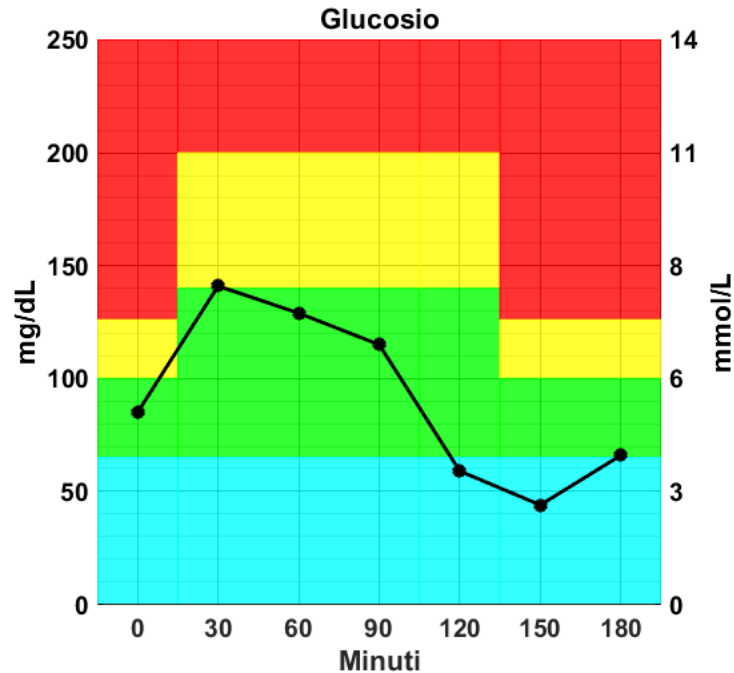
Donna, 53 anni, peso 76.5 Kg, Altezza 165 cm, BMI 28.438 (Sovrappeso).



$G_0=83$ mg/dL – $G_{120}=87$ mg/dL – $I_0=3.9$ mU/L – $Tri_0=81$ mg/dL
HOMA=0.80 – QUICKI=0.3984 – McAuley=9.74

Caso 7 – Euglicemico – Pattern V

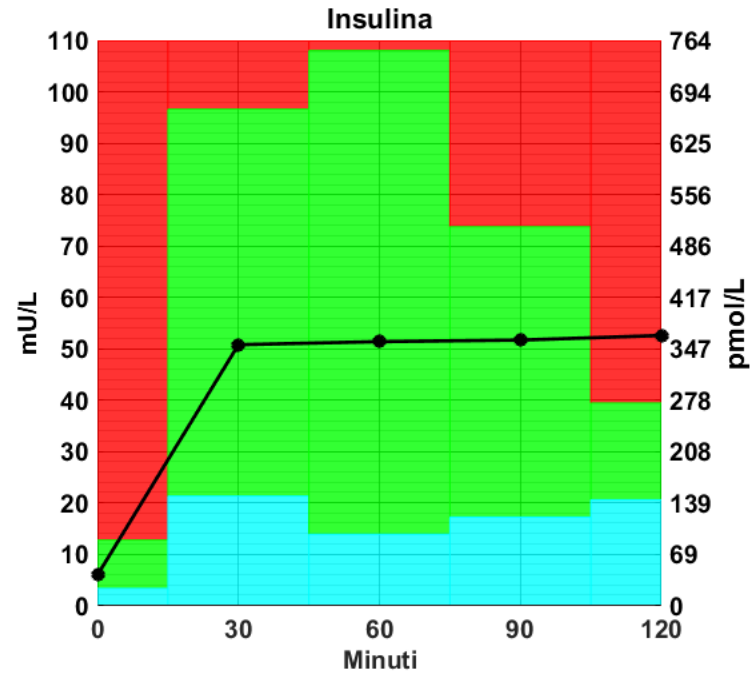
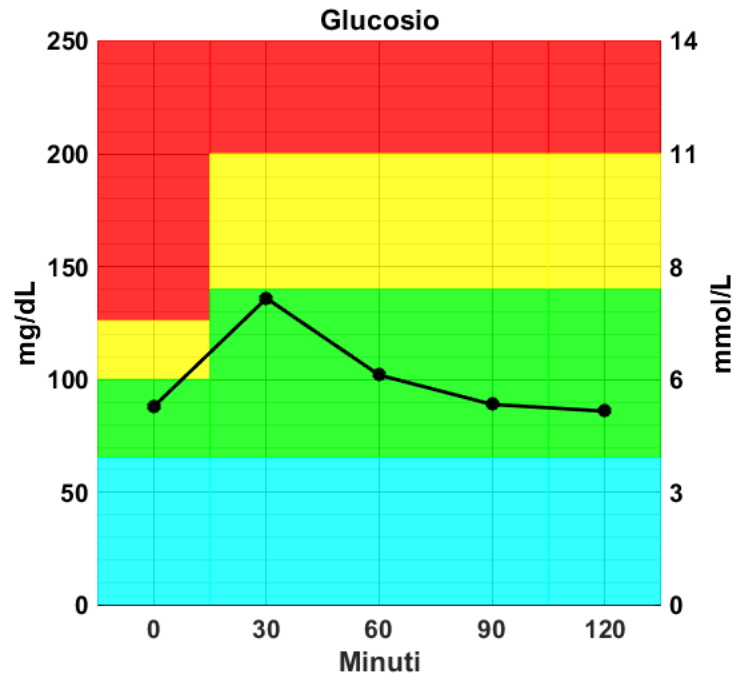
Donna, 47 anni, peso 78 Kg, Altezza 160 cm, BMI 31.314
(Obesità di I grado), affetta da Lupus Eritematoso Sistemico



$G_0 = 85 \text{ mg/dL}$ – $G_{120} = \mathbf{59 \text{ mg/dL}}$ $G_{150} = \mathbf{44 \text{ mg/dL}}$ – $I_0 = 7 \text{ mU/L}$ – $Tri_0 = 139 \text{ mg/dL}$
HOMA=1.47 – QUICKI=0.3604 – McAuley=7.00

Caso 8 – Euglicemico – Pattern II

Donna, 20 anni, peso 67.5 Kg, Altezza 157 cm, BMI 28.412
(Sovrappeso)



$G_0=88$ mg/dL – $G_{120}=86$ mg/dL – $I_0=5.9$ mU/L – $Tri_0=80$ mg/dL
HOMA=1.28 – QUICKI=0.3683 – McAuley=8.71