

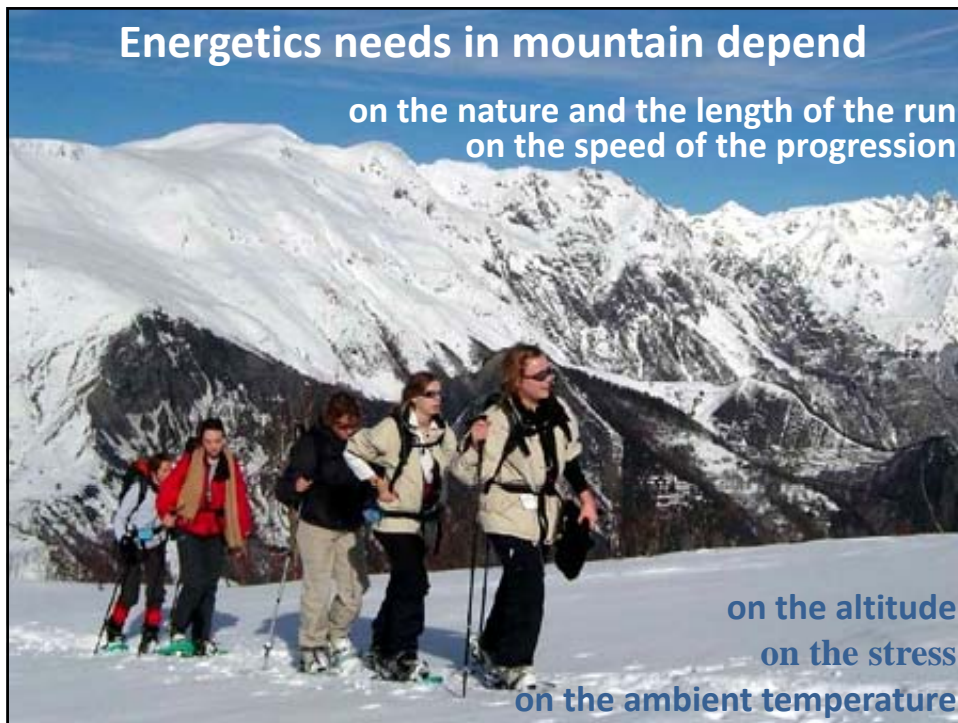
**NUTRITION in the SPORTS of  
MOUNTAIN**

Dr Jean Pierre Herry  
Ecole Nationale de Ski et d'alpinisme  
74400 Chamonix Mont-Blanc

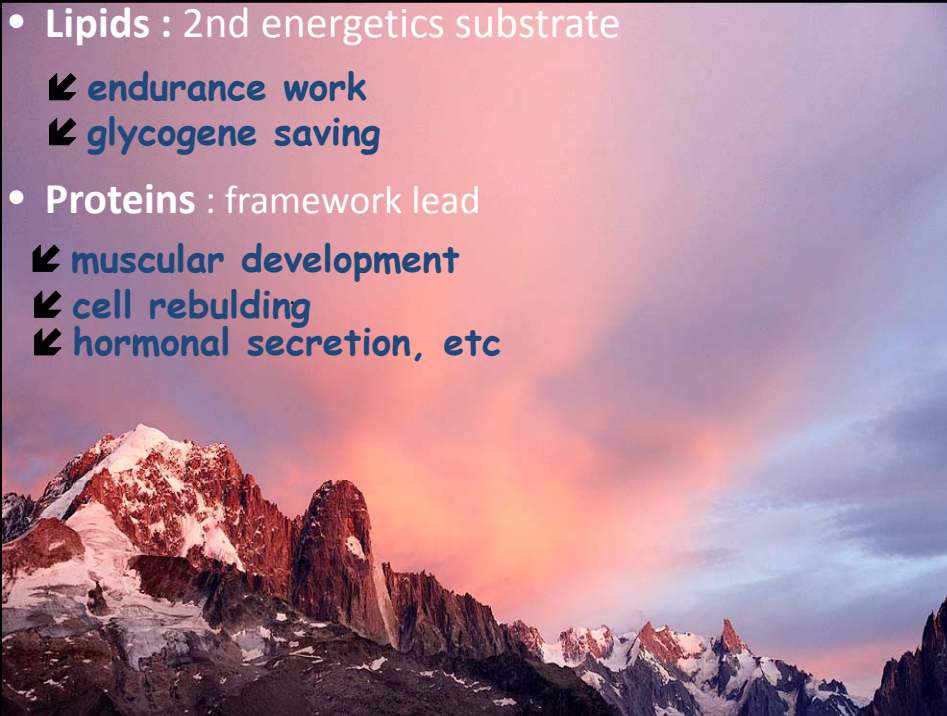


**NUTRITION in the SPORTS of  
MOUNTAIN**

If a good feeding cannot supersede a good preparation, it can make the run more pleasant and delay the appearance of the state of strain.




- **Lipids** : 2nd energetics substrate
  - ↳ endurance work
  - ↳ glycogene saving
- **Proteins** : framework lead
  - ↳ muscular development
  - ↳ cell rebulding
  - ↳ hormonal secretion, etc

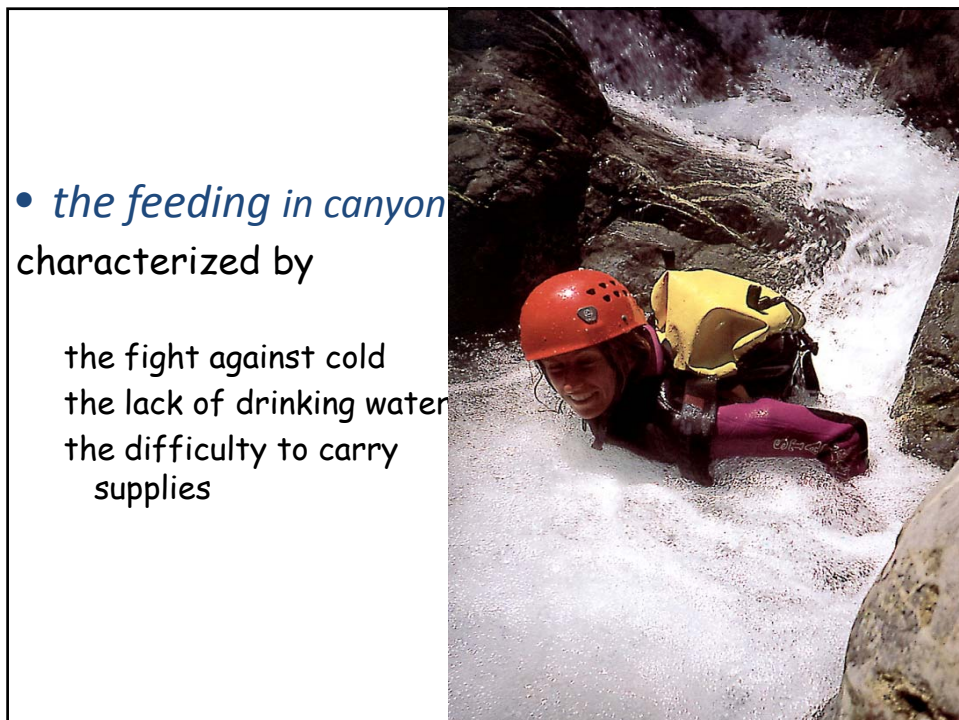
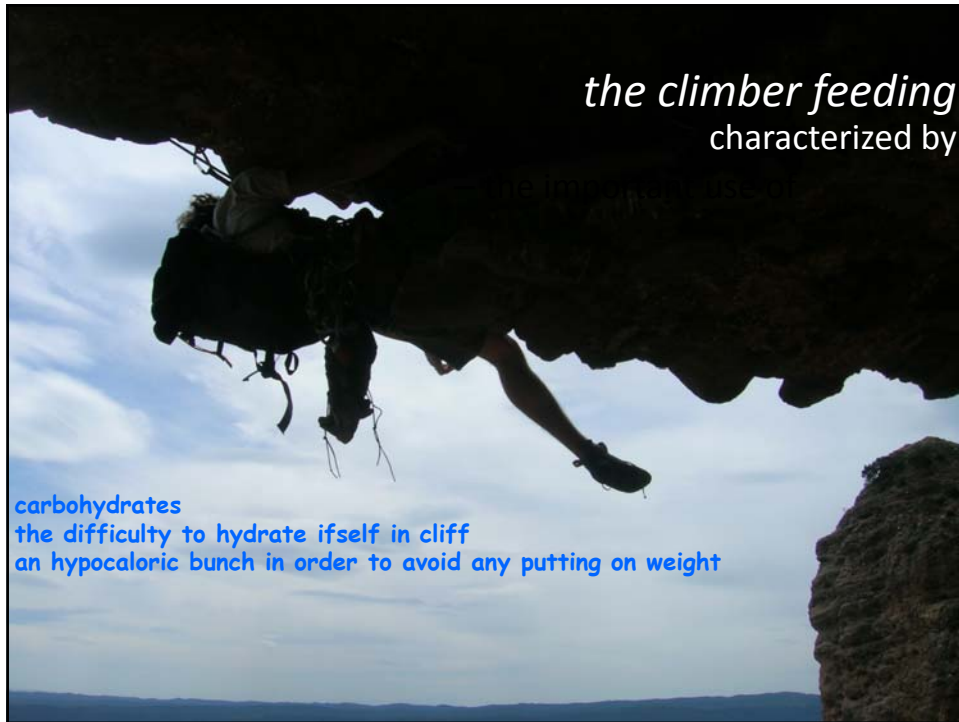


**belong activity**

the mountaineer feeding  
characterized by

- the small weight of the foods carried
- the lack of choice among foods
- the very divided feeding

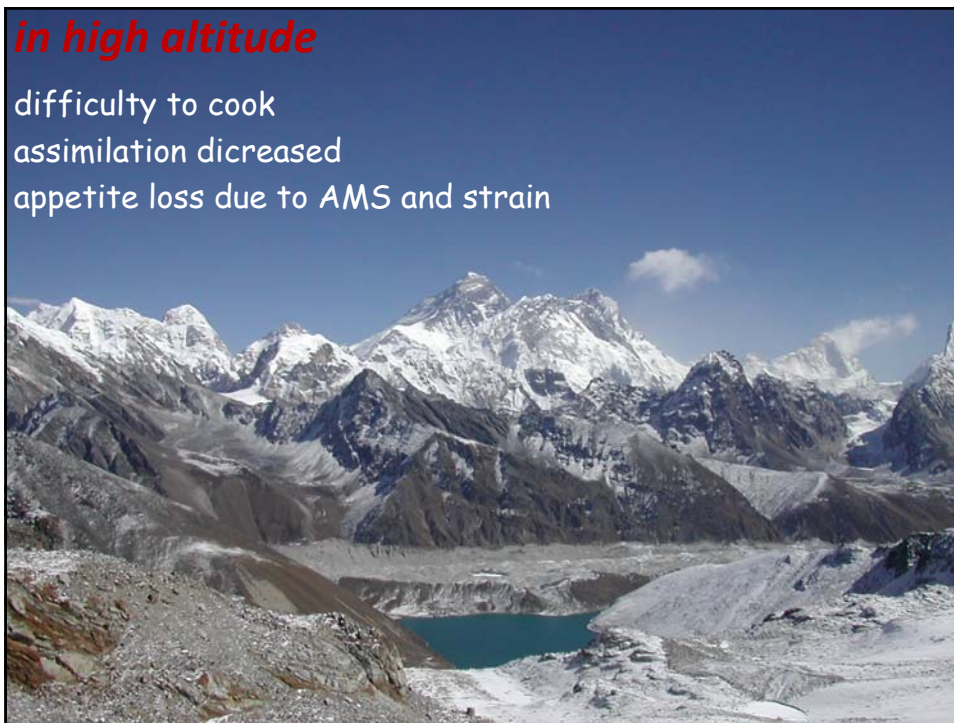






***in high altitude***

difficulty to cook  
assimilation decreased  
appetite loss due to AMS and strain



**Everest ascent (c. Janin august 1991)**

Measure of the energetics  
expenditure by doubly labeled  
water technic (by isotope)



## Energetics results of the Everest ascent



Providing = 1800 Kcal  $\pm$  350  
Expenditure = 3100 Kcal  $\pm$  350

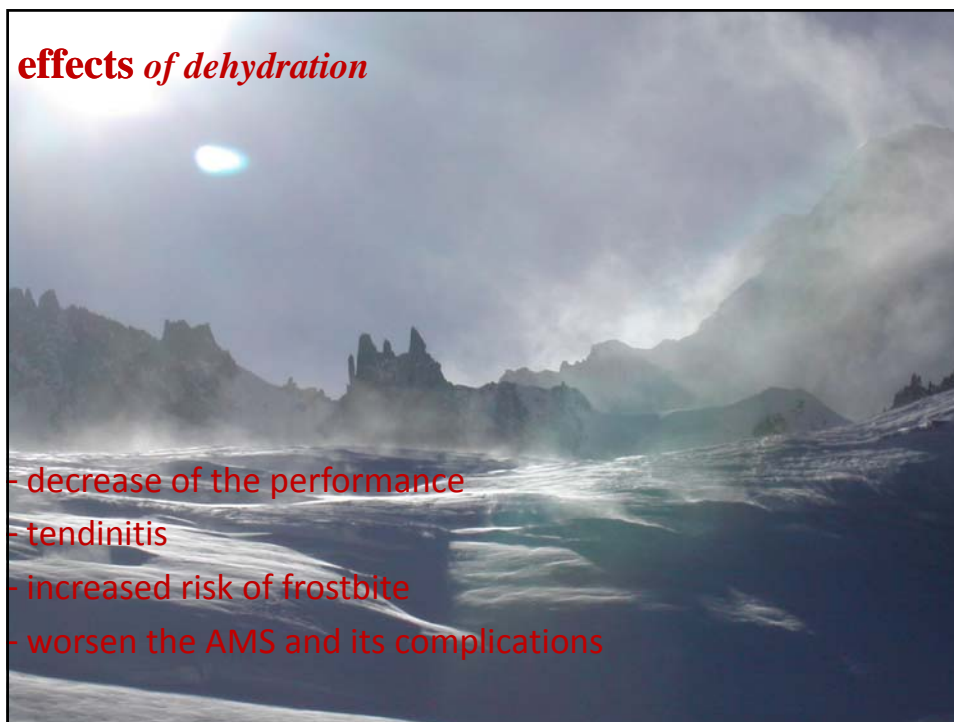
Weight loss : 2,2 kg  $\pm$  1,5  
Fat mass loss : 1,4 kg  $\pm$  0,7

## Water and minerals salts needs in mountain

### *Factors of dehydration*



perspiration - dry air - water lack - dehydrated foods







Thank you for having payed  
attention

