

The Mystery of water: relevance of water on health

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Outline

- Introduction
- Functions of body fluids
- Sources and Loses
- Benefits of water intake
- Take home point.
- Conclusion

INTRODUCTION

- Water is a major component of the earth
- It is crucial to all living organisms.
- It is chemically made up of hydrogen and OXYGEN(most needed gas by man)
- By appearance it is colorless, odorless and tasteless.
- Can occur in three elemental states (solid, liquid and gas)

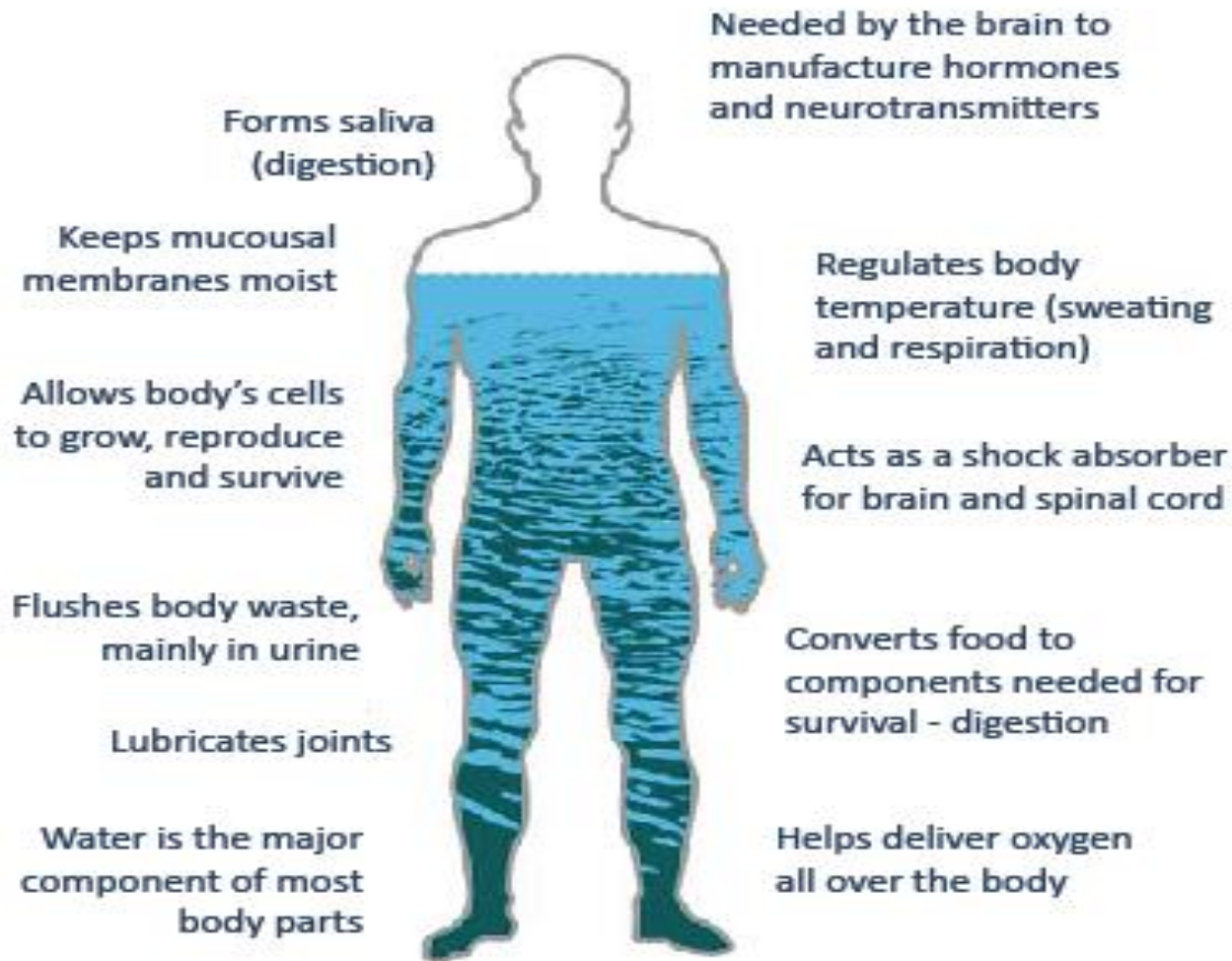
INTRODUCTION

- Constitutes about 60% of every adult human being (with the assumption of a weight of 70kg for a physiologically normal man: it totals about 42L)
- The brain and heart are composed of 73% water, and the lungs are about 83% water. The skin contains 64% water, muscles and kidneys are 79%, and even the bones are watery: 31%.

Functions of body fluids

- Water exists in various forms in the body and therefore plays different functions viz:
 - Digestion
 - Absorption
 - Circulation
 - Nutrient and waste transportation
 - Temperature regulation
 - Creation of saliva and joint lubricants.

What Does Water do for You?



SOURCES AND LOSES

- The body is in a state of continuous water loss therefore there must be adequate intake of water to maintain a balance.
- Loss is continuous however there is increased loss in some conditions: exercise, hot climate, high altitude, physical activity, disease state (vomiting, diarrhea, burns etc)

Water inputs (ml/day)				Water outputs (ml/day)			
	Min	Max	Average		Min	Max	Average
Beverages	1400	1750	1575	Urine	1200	2000	1600
Foods	600	750	675	Skin	450	450	450
Subtotal	2000	2500	2250	Respiration	250	350	300
Metabolic water	250	350	300	Feaces	100	300	200
Total	2250	2850	2550	Total	2000	3100	2550

*It is normally assumed that the contribution of food to total dietary water intake is 20-30% whereas 70-80% are provided by beverages. This relationship is not fixed and depends on the type of beverages and on the choice of foods.

SOURCES AND LOSES

- The loss of fluid daily is through:
 - Sweat (skin)
 - Breath (lungs)
 - Urine (kidney)
 - Faces (digestive system)
 - Others (vomiting, metabolic activities etc)

SOURCES AND LOSES

- An expected intake on daily basis:
 - Adult man 3.0L
 - Adult woman 2.2L (could be more)

SOURCES AND LOSES

- The following are sources of our water intake:
 - Food intake (solid or liquid)
 - Water and other liquid drinks
 - Fruits intake
 - Vegetables
 - Metabolic activity within the body.

Benefit of water intake:

- Helps the skin look fresh.
- Helps energize muscles.
- Helps maintain normal bowel function.
- Helps the kidney's excretory function (prevents waste accumulation)

Take home point

- Make a conscious decision from today to consciously take water daily.

Conclusion

- God made water very abundant and free because he knows you need it.....therefore utilize the free gift of God

Thank you
for Listening