Optimization of *EUGLENA* and their measurement method

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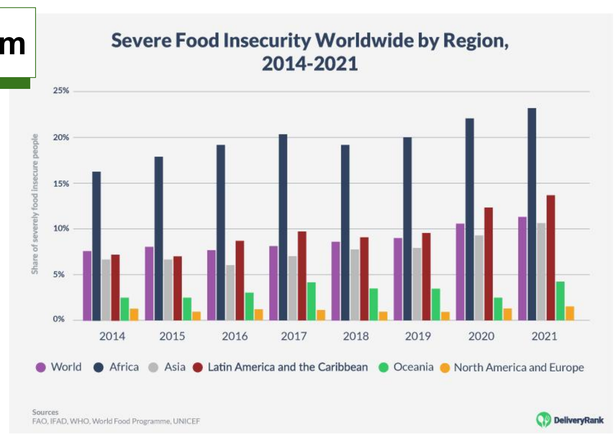
INTRODUCTION

Problem

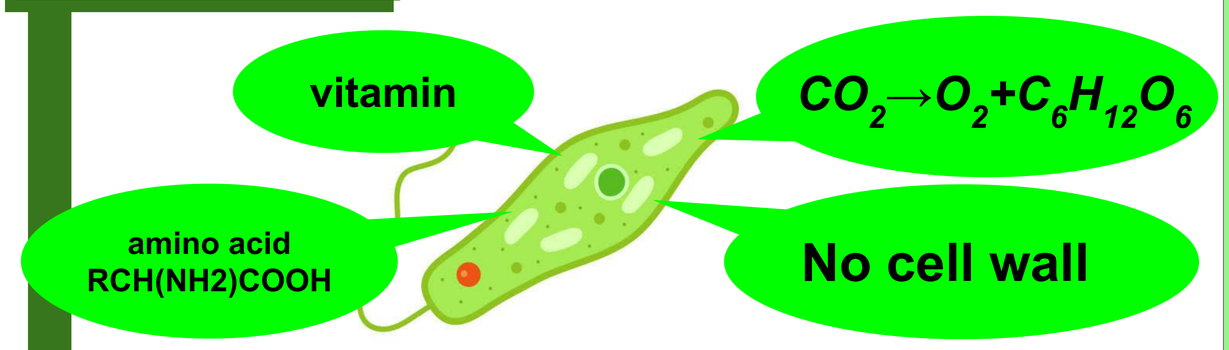


2 ZERO HUNGER

Fewer people have access to quality food

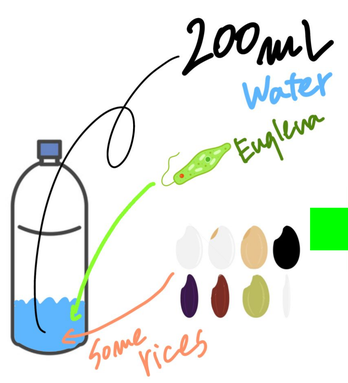
They are unable to maintain an active lifestyle

Instead of these foods:

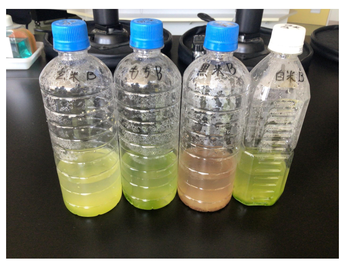


MATERIAL & MATHODS

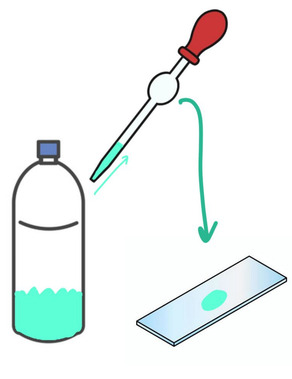
- Euglena ・Plastic bottle ・Small pipette
- hemocytometer : Slide glass
- Microscope ・Water ・Rices（Black rice, brown rice and white rice, sticky rice）



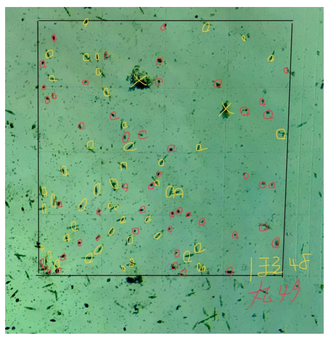
Rices,euglena and water in the plastic bottle



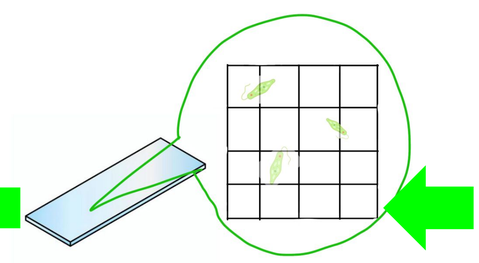
one month later



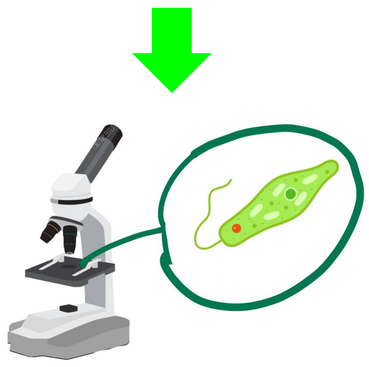
Place the medium on the glass slide



Items with different shapes or whose bodies extend more than half of the frame are not counted.



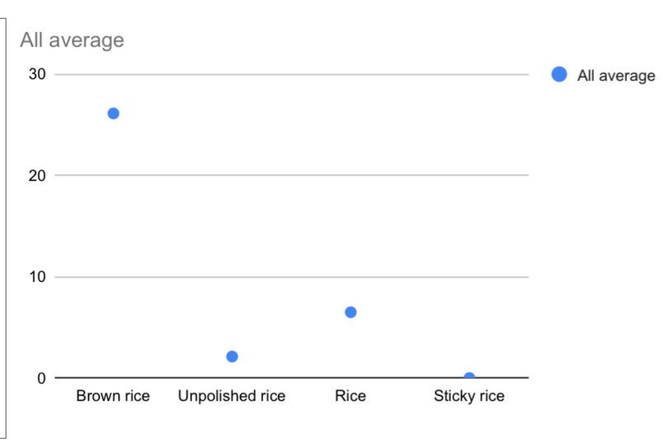
There are four 4✖4 squares on the slide glass, so photograph that area.



Photographing Euglena with a microscope

RESULTS

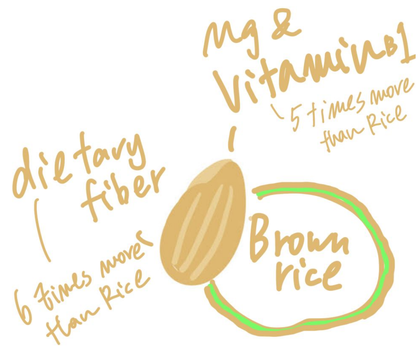
The medium containing brown rice had the highest number of euglena. The average is about 26. Next is black rice, which has an average of 2 euglena.



Raw date

	upper left	upper right	lower right	lower left	total	Average
Brown rice ①	14	13	20	27	74	18.5
Brown rice ②	42	26	55	12	135	33.75
Unpolished rice ①	3	0	2	3	8	2
Unpolished rice ②	3	2	4	0	9	2.25
Rice①		18	9	0	27	6.75
Rice②	7	3	9	6	25	6.25
Sticky rice①	0	0	0	0	0	0
Sticky rice②	0	0	0	0	0	0

DISCUSSION



We ended up experimenting with mL instead of g.

I'm currently thinking about the compatibility between brown rice and euglena!

CONCLUSION

Euglena in the brown rice medium was the most numerous.

REFERENCES

https://ja.wfp.org/food-systems
https://www.euglena.jp/times/archives/14327

https://www.euglena.jp/times/archives/14327

https://adrasha.com/listing/world-food-programme/

謝辞