

# The "Share Cart" System

— Everyone has a RIGHT to enjoy shopping —

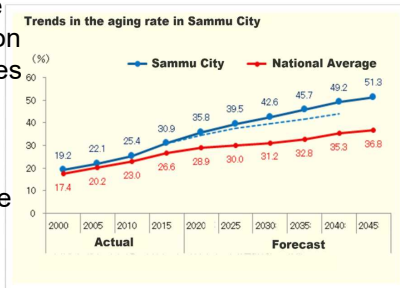
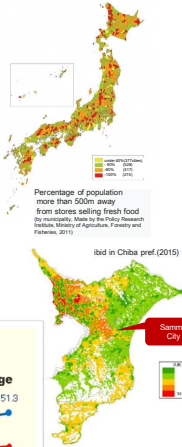
Haruna TOMORO, Ayaka YAGI, Nagi WAKAYAMA

## ◆Hypothesis

Is it possible to solve the problem of "food deserts" keeping the elderly walking ?

## ◆Background

- Food deserts are a global issue common in aging industrialized countries.
- In Japan, the number of elderly is increasing.
- The aging rate of Sammu city is higher than the Japanese average.
- Regional decline makes the situation worse. Many stores are withdrawing from Sammu city.
- So, the elderly in Sammu city are suffering from food deserts.

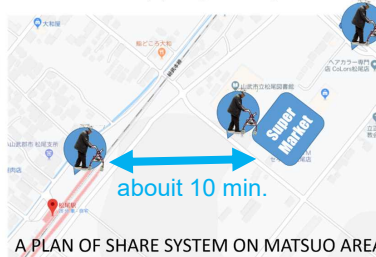


## ◆Conclusion

It is possible setting shopping carts station near the supermarket etc.

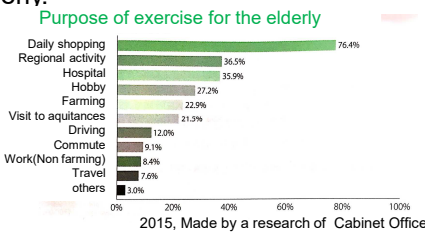
## ◆Action plan

- We got the idea from *share bike system* which spread throughout the country.
- We set up "the shopping stations" nearby rail road stations and bus stops in Sammu city.
- The elderly come by train or bus and stop by the station.
- They can borrow the shopping carts for the elderly and go shopping at the super market *on foot*.
- After shopping, they return the cart to any station.



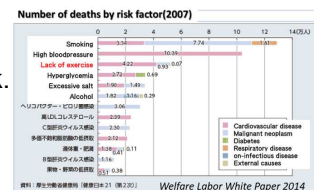
## ◆Shopping as a mean of exercise

- There are some ideas that fight against this such as home meal delivery.
- However, meal delivery services take away exercise opportunities for the elderly.
- Because most of the elderly "go out" for shopping.
- Shopping is very important for the health of the elderly.



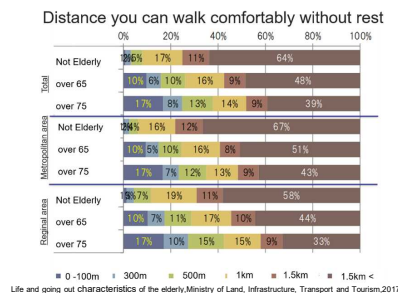
## ◆Expected effect

- It helps elderly people with walking.
- They become able to walk long distances without overdoing it.
- They can realize the enjoyment shopping themselves.
- Of course they will be healthier...
  - Lower one's blood pressure.
  - Lower the risk of heart attack.
  - Make bones stronger.
  - It can prevent memory loss.
  - It can prevent lung cancer.



## ◆Walking exercise appropriate for the elderly

- 60% of the elderly(over 75) can walk 1km.
- It takes 10 minutes to walk 1km at least.
- Walking 10 minutes per day will prevent the elderly from many diseases.



So, we should think of a system that helps the elderly walk 1 km comfortably.

Correlation between Steps per day, Rapid Walking, Diseases

STEPS	WALKING TIMES	DISEASES that can be prevented or improved
2000	00.0 (min)	Bedridden
4000	05.0 (min)	Depression
5000	07.5 (min)	Dementia, Heart disease, Stroke
7000	15.0 (min)	Cancer, Arteriosclerosis, Osteoporosis
8000	20.0 (min)	High blood pressure, Diabetes, Glucose abnormality, Metabolic syndrome(over 75)
9000	25.0 (min)	Essential hypertension, Hyperglycemia
10000	30.0 (min)	Metabolic syndrome(under 75)
12000	40.0 (min)	Obesity

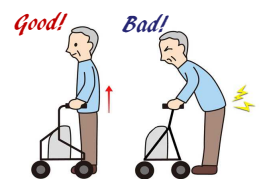
https://www.sawai.co.jp/kenko-suishinka/zubora/201710.html

And, this is the key of the system ...



## ◆To spread the plan

- We are going to hold events at Senshinkan, an local public hall in Sammu City.
- There is a "Fukusi Café" nearby, so suitable to demonstration.
- for example...
  - We will lecture on how to use a shopping cart.
  - We will do recreation and check ups with the elderly.
  - Actually going shopping with high school students.



Stretch your back

## ◆Further plan

- Making special carts for the elderly people.
- Find the way to carry luggage for the bus user.
- Spread to all over the world.