CMT Utensils

Team 1
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Charcot-Marie-Tooth Disease

• CMT disease affect the afflicted person of his or her nerves
• It disabled the person of their usage of hands, forearms, lower legs and feet
• It also causes muscle weakness
Problem Statement

To create an utensils that can remain in the hand of CMT victims, while they consume their food

Goal
• To provide CMT victims to enjoy their meal with utensil on their own

Objectives
1. Ease of Cleaning
2. Durability
3. Production Cost
4. Equip Independently
5. Ease of Use
6. Inexpensive
7. Versatile

Constraints
• Weight
• Materials
• Size
Existing Products

• Thick Grip and J Style Knife
• Thick Grip with Strap
• A Pencil Held Device
Existing Products

• A Hook Grip
• A Band Grip
Concept Generalization

- Employ Magnet to pick up utensil
- Strap on using Velcro
- Pencil style, replace pencil with utensils
- Larger and wider grip
- Clip style grip
- Hinges style grip
- Hook style
Sketches

Elastic Band Design

Elastic band over hand

velcro

elastic band to grip silverware

velcro
Sketches

Large Grip Design

Adaptable silverware holder

Large grip
Sketches

Hook Design
Sketches

Clip Design
Sketches

Pencil Style Design

ARM Brace
arm brace
adjustable arm holes

Utilise...
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<th>Band Style</th>
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Final Product

Velcro Style Grip
- How is it superior?
- Features?
Sources

Information on CMT

• https://www.mda.org/disease/charcot-marie-tooth