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# Dietary Habits Amongst a Group of Palestinian ASD Children



# Introduction:



- ▶ **Autism** is a complex neurobehavioral condition that includes impairments in social interaction and developmental language and communication skills combined with rigid, repetitive behaviors. Because of the range of symptoms, this condition is now called **autism spectrum disorder (ASD)**.
- ▶ It covers a large spectrum of symptoms, skills, and levels of impairment. ASD ranges in severity from a handicap that somewhat limits an otherwise normal life to a devastating disability that may require institutional care.

## Study problem:

Problems and eating habits amongst children with autism were reported these include:

Eat only certain foods, Eating and drinking in specific places, inflexibility , over eating, hypo/hyper sensitivity

## Prevalence of autism:

- ▶ in UK 1 in 100 autistic children (2010)
- ▶ in US 20-1000 autistic children (2011 -2012)
- ▶ No records in Palestine
- ▶ Autism usually appear by age 18-36 months.
- ▶ Often, it can be diagnosed as early as 18 months



## Objective:

- ▶ To study the nutritional habits of children with autism and their impact on body weight

# Materials and methods:

- ▶ A validated questionnaire (Arabic version) was used to assess the nutritional habits amongst ASD children.
- ▶ It was distributed over a group of parents in Tulkarem through the Learning and Autism Center.
- ▶ This questionnaire was taken from a study that has studied ASD Children in Palestine 48, translated from English.
- ▶ This questionnaire concerns problems related to eating habits and feeding problems in children with autism.
- ▶ Age of target group (6-12 years).

## ► The questionnaire contains two parts:

A. Section I: Personal information and information about illness

B. Section II: 7 dietary habits :

1. chewing and swallowing
2. eating avoidance
3. food selectivity
4. eating sameness and inflexibility
5. eating rituals
6. overeating
7. behaviors during mealtime



## A sample of the questionnaire

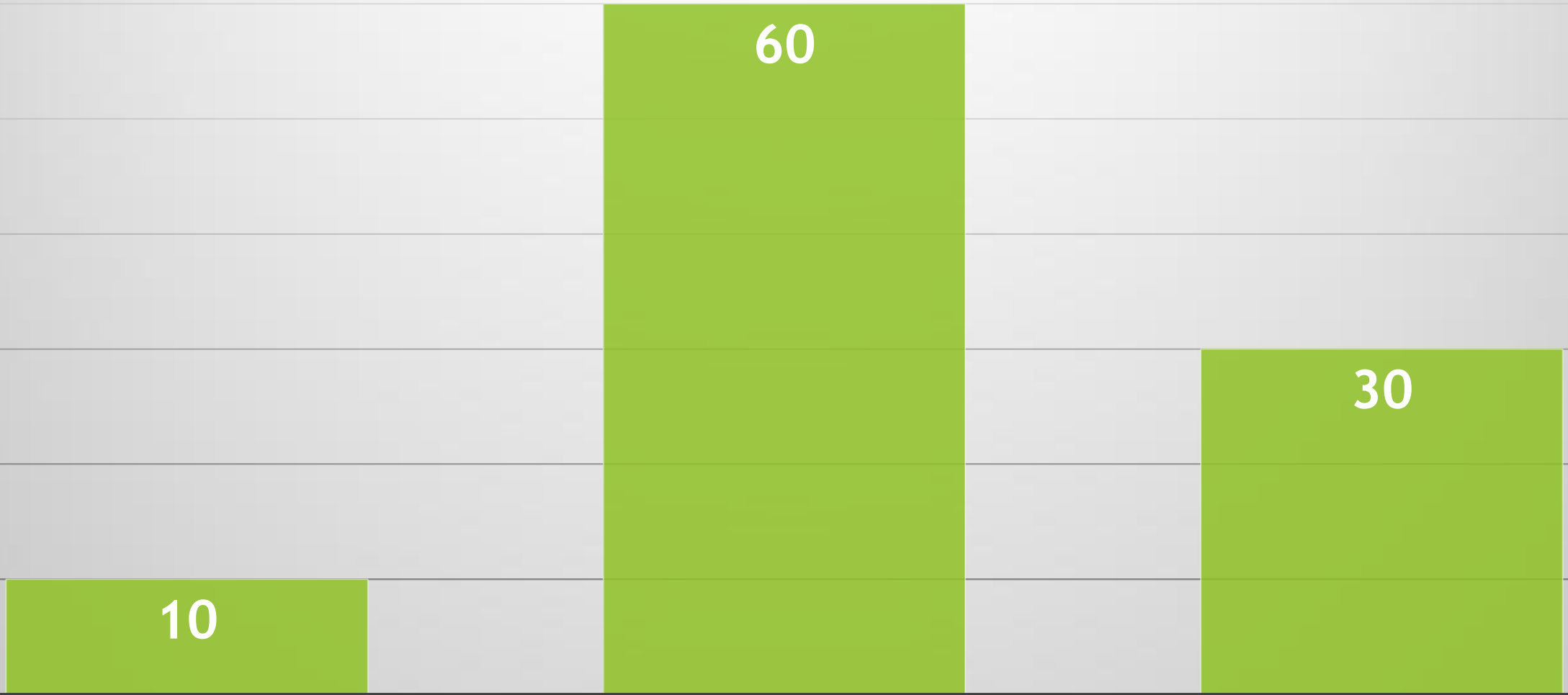
?	?	5 ? عالي جدا ?	4 ? عالي ?	3 ? متوسط ?	2 ? قليل ?	1 ? قليل جدا ?	لا يحدث
12??	المشكلة او العادة يأكل   يشرب اشياء معينة فقط اثناء وجبة الطعام	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
13??	يأكل نوع طعام واحد فقط اثناء وجبة الطعام	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
14??	يفضل الأطعمة نفسها في كل وجبة	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
15??	يرفض تذوق الاطعمة الجديدة	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
16??	يأكل طعام غير عن الأطعمة المعدة لأفراد الأسرة	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
17??	يأكل مواد معينة (لبنة أو صلبة)	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
18??	يأكل من انواع محددة من الاطعمة	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
19??	يفضل فقط الاطعمة الحلوة أو المالحه او الحامضة	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
20??	يتجنب الاطعمة \ات الروائح القوية	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
21??	يأكل الاطعمة فقط عندما تكون في درجات حرارة معينة	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ??	<input type="checkbox"/> ?	<input type="checkbox"/> ?
??	Eating Selectivity Total score??	??	??	??	??	??	??



## Results and discussion :

- ▶ 10 families have responded.
- ▶ Distribution of participants:  
Female 30% (3)  
Male 70% (7)
- ▶ Average age was 9 years and 4 months.

# Percent BMI to Age

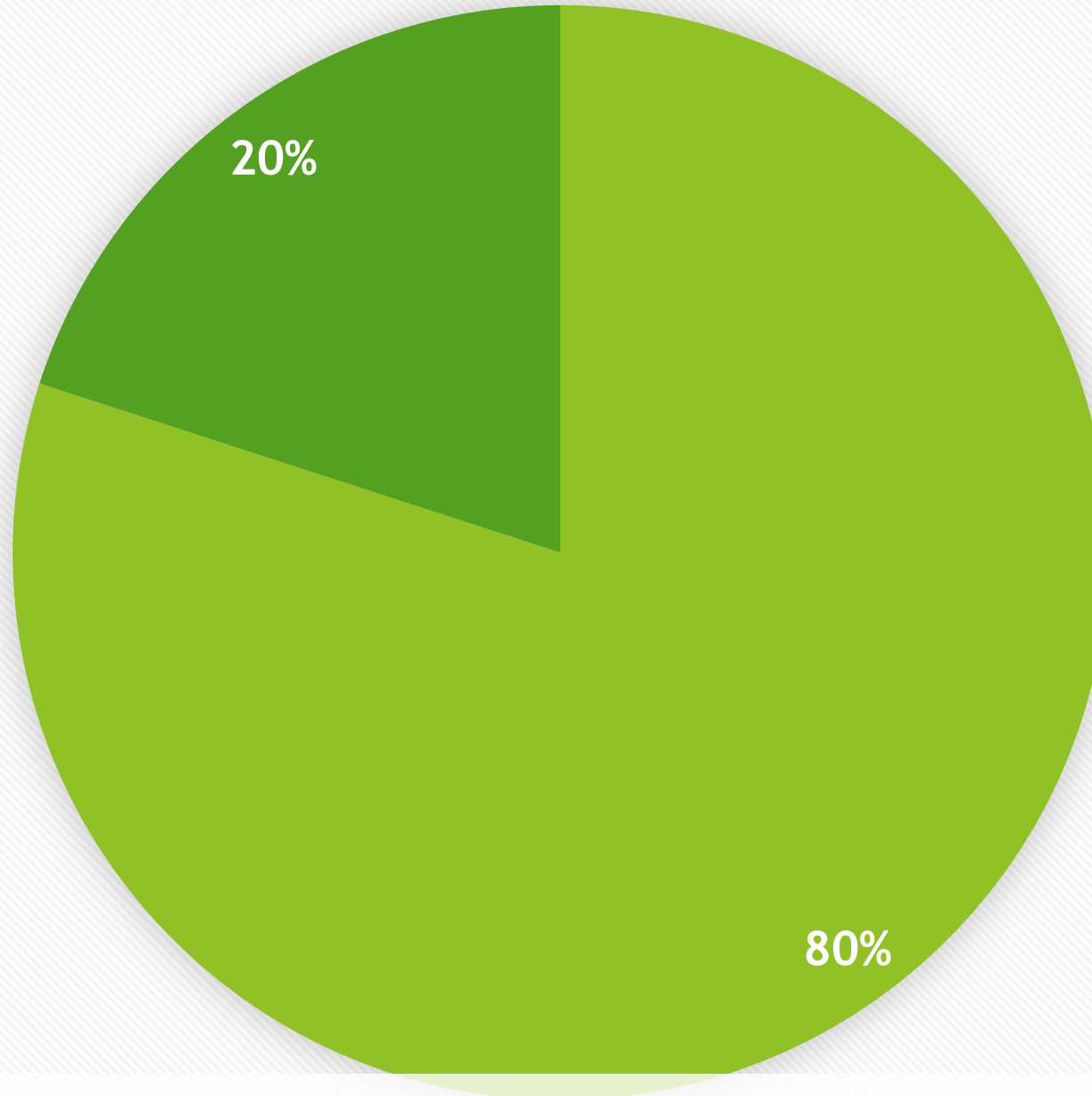


UNDERWEIGHT

NORMAL

OVER WEIGHT

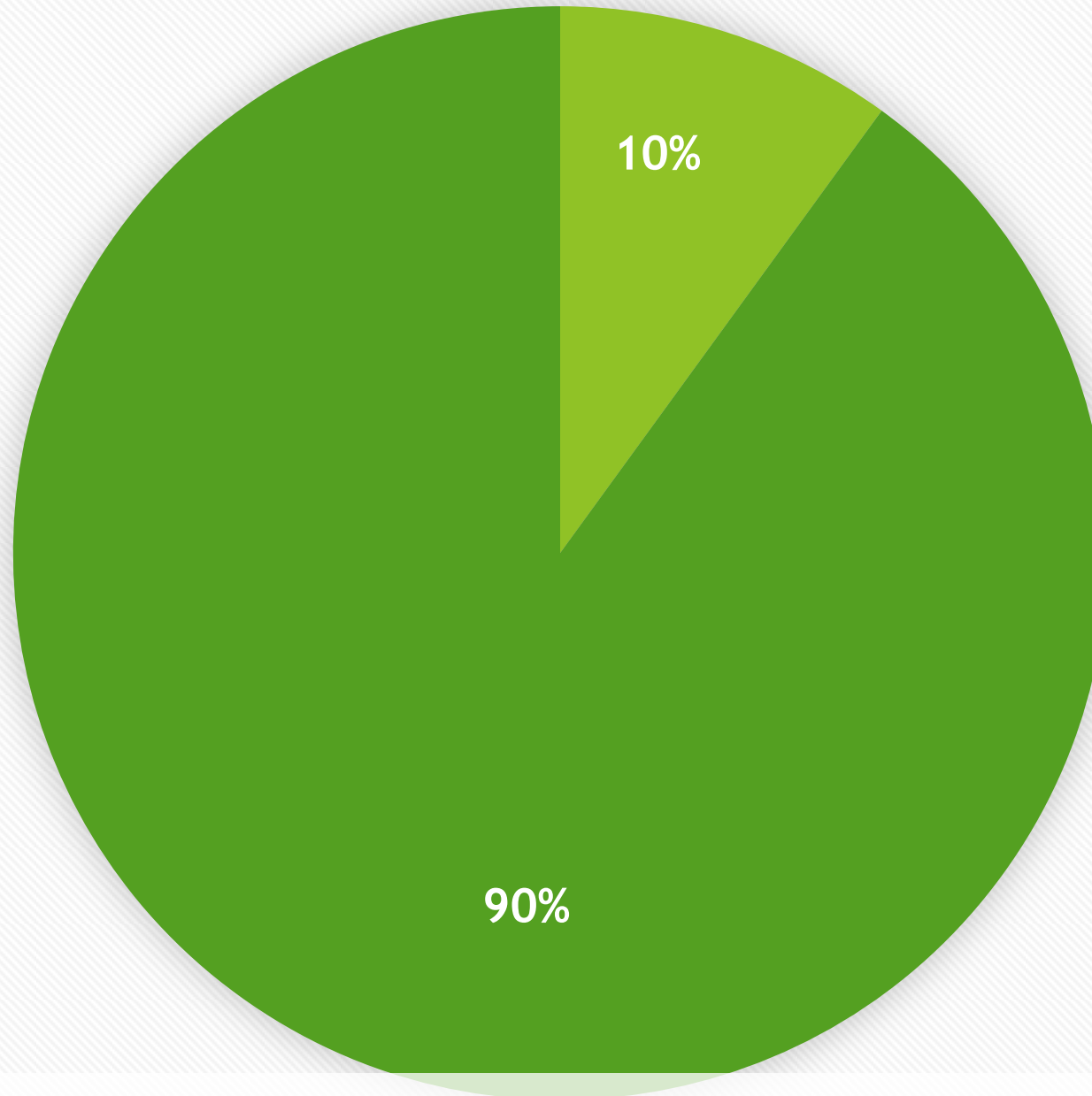
# Exclusive breastfeeding for six month



■ exclusive breastfeeding for six month

■ exclusive breastfeeding for less than six month

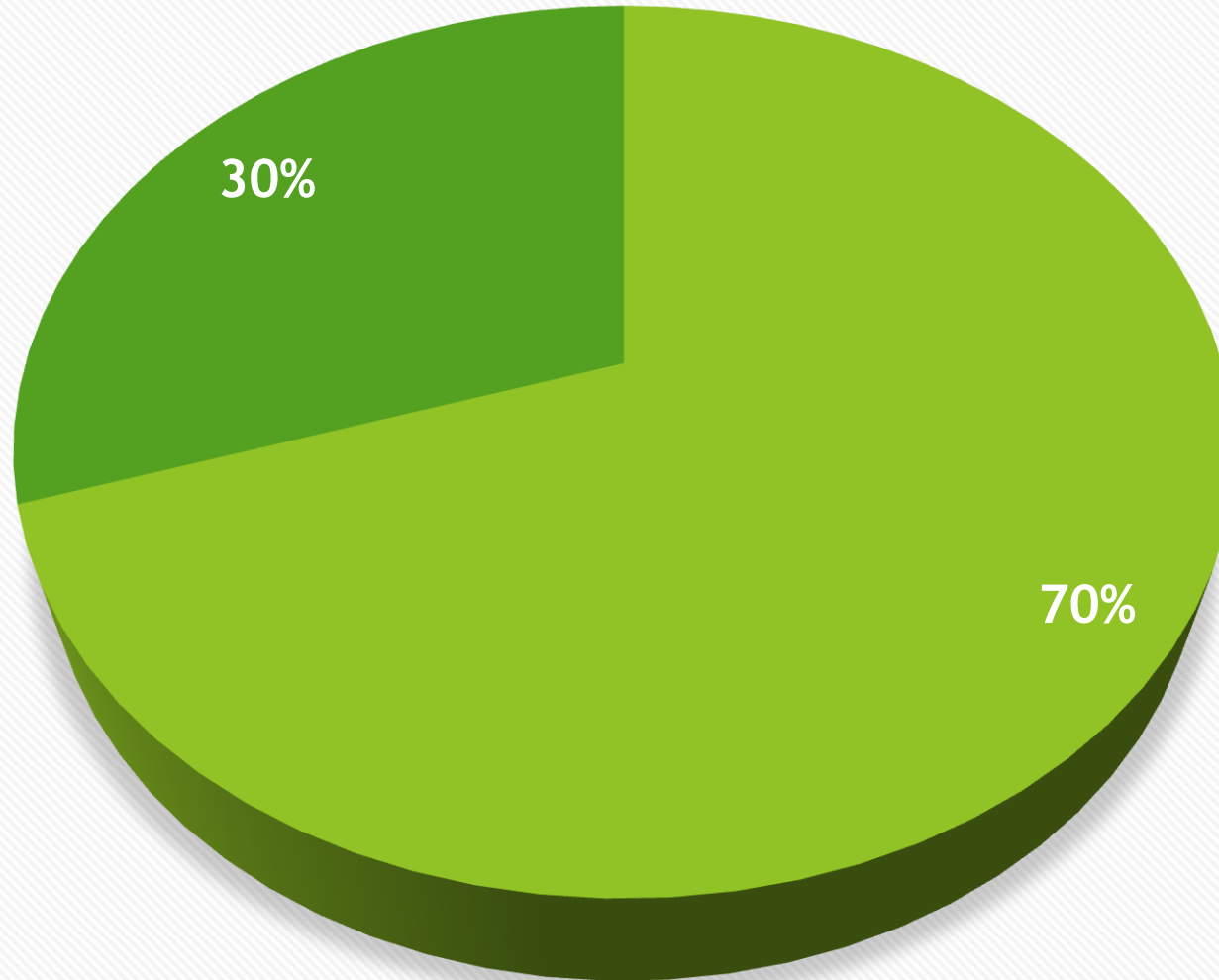
# Allergy from specific food



■ non allergy from specific food

■ allergy from specific food

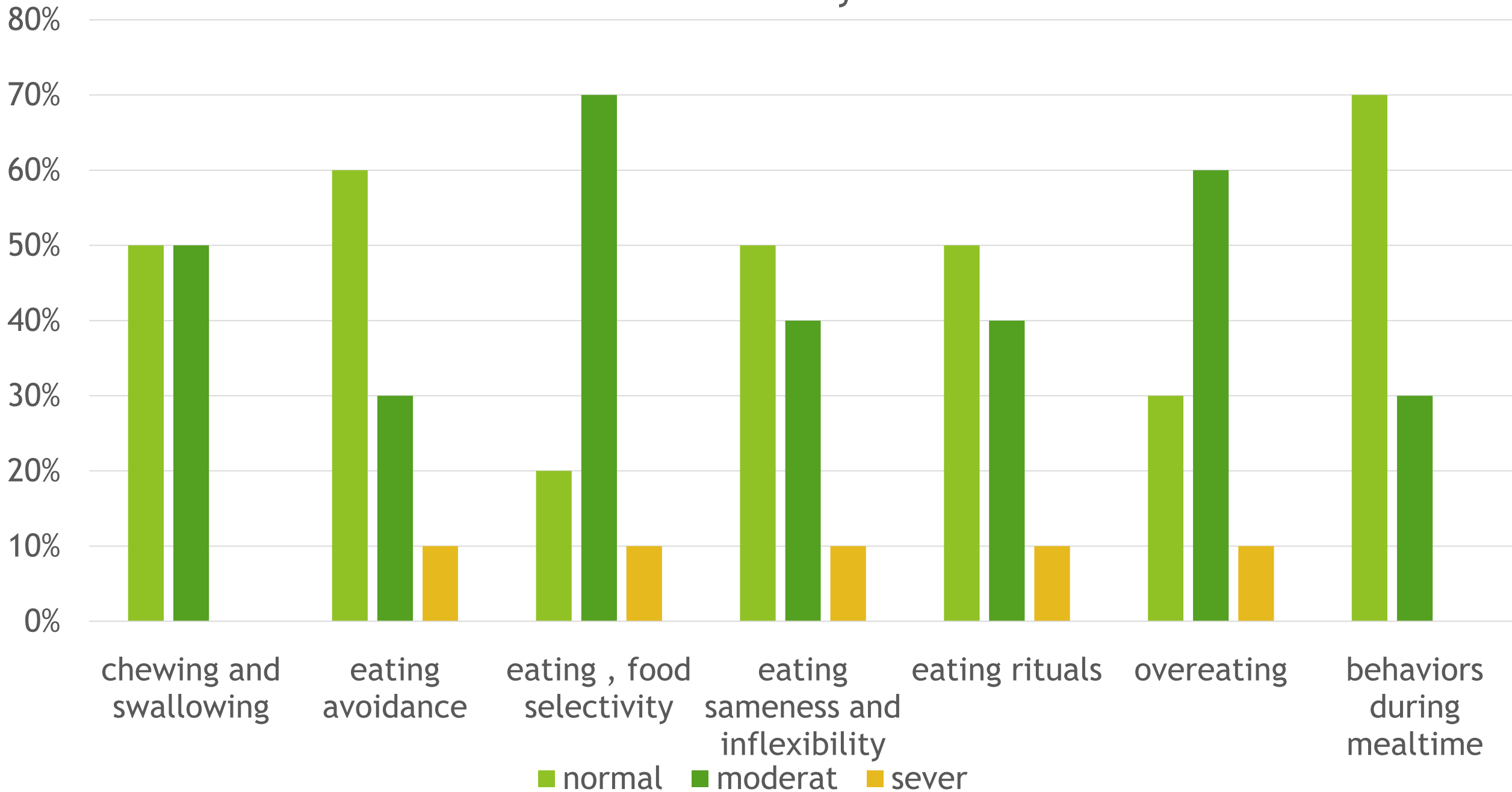
# Percent of independent eating



■ independent eating

■ dependent eating

# Problems in dietary habits



## Conclusion :

- ▶ The study confirmed the existence of a variety of problems in the dietary habits of children of autism and one of the most obvious problems: selective food
- ▶ Abnormal BMI (40%) amongst ASD children could be associated with their nutritional habits.

## Recommendations :

- ▶ A broader study should be conducted to confirm the results because these results are preliminary
- ▶ Study to understand dietary habits in children with autism by developing appropriate nutrition programs for children with autism
- ▶



## Limitation :

- ▶ The sample was small and had 10 children
- ▶ Some families reported missing information

*Thank You!*

