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The Effect Of Giving Pudding Seeds Of Yellow Pumpkin And Papaya On Nutritional Status In The Working Area Of The Puskesmas Gilingan

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ABSTRACT

Condition nutrition not enough will influence many organs and systems Because often accompanied with deficiency intake substance nutrition much needed macro and micro for body . For improve nutritional status toddler nutrition not enough there is a number of way one of them that is with seed pumpkin yellow and papaya . Objective study For know influence gift pudding seed pumpkin yellow and papaya on nutritional status in toddlers nutrition less in the Work Area Public health center mill . Research design use design experimental with approach two group pretest- posttest design . A total of 22 people became sample study with age 24-59 months , taking sample using purposive sampling. Data analysis used the Wilcoxon test. Research results This is the average nutritional status toddler before and after treatment group is -2,293 ± 0.32 SD and -1.889 ± 0.47 SD. Average nutritional status toddler before and after control group are -2.23±0.28 SD and -2.09±0.354 SD. Different test results before and after gift group treatment (p=0.007), before and after gift group control (p=0.047). Research conclusion This is there is influence gift pudding seed pumpkin yellow and papaya on nutritional status in toddlers nutrition less .

1. INTRODUCTION

Toddler nutrition not enough prone to very to various disease. Condition nutrition not enough will influence many organs and systems Because often accompanied with deficiency intake substance nutrition much needed macro and micro for body . Condition lack no nutrition handled more carry on will impact bad to disturbance growth and development physique nor mentally, reduce level intelligence , creativity , as well productivity population (MOH RI, 2000). According to Report Global Nutrition in 2017 showed problems of nutritional status in the world including prevalence wasting (thin) 52 million toddlers (8%), stunting (short) 115 million under five (23%) and overweight 4 million toddlers (UNICEF and WHO, 2017). National stunting prevalence based on Basic Health Research in 2018 still high 30.8% in 5 years time final only down 7.2% of in 2013 , namely 37.2%.

The prevalence of stunting in the province Central Java by 28.5% in 2017 (Central Java Health Office , 2017). Based on the data obtained from the Surakarta City Health Service (DKK), in 2018 prevalence nutrition not enough experience enhancement compared to in 2017 , namely 2.4% to 3.3%. Prevalence nutrition not enough highest are at the Health Center Sangkra with percentage of 15.2% (as many as 564 toddlers) in Pasar Kliwon District . In the vein second that is Public health center Mill with percentage of 4.9% (as many as 95 toddlers), and the lowest are at the Health Center Insert with percentage of 0.8% (as many as 18 toddlers).

For improve nutritional status toddler nutrition not enough there is a number of way one of them that is with seed pumpkin yellow (Cucurbita moschata Durch). Inside 100 g of seeds pumpkin yellow contains the mineral zinc of 6.5 mg (Widowati et al , 2008). Zinc plays a role in various reaction , so lack zinc influential to network body , especially in the process of growth (Almatsier , 2009). Zinc can increase body weight by an increase in circulating insulin like factor growth (IGF-I), lust eat , increase consumption energy and protein. IGF-I is a mediator of growth For promote action hormone growth (Walker et al., 2005).

Besides seed pumpkin yellow , available fruit known papaya (Carica Papaya). own benefit in increase weight . Fruit pawpaw is fruit that has mark nutrition high . existing vitamins in fruit pawpaw is compound organic certain required _ in amount small but essential For reaction metabolism in cell and essential For normal growth and maintenance health (Mawaddah and Fitriyanti , 2017).

Fruit pawpaw can influence weight due fruit pawpaw can prevent happening disturbance digestion in the stomach child . Mechanism fruit pawpaw can increase lust Eat child and speed in absorption substance nutrition . Speed absorption substance nutrition This affected by power digestibility, composition substance nutrition , normal state of mucous membranes smooth , hormones and adequate vitamin intake (Fajria and Rika, 2013). In line enhancement definite weight will affect nutritional status . Based on description in background behind problem the researcher interested For researching influence gift pudding seed pumpkin yellow and papaya on nutritional status in toddlers nutrition less in the Work Area Public health center mill.

2. METHOD

The research design used is experimental and using a *two group pretest-posttest design approach*. This research was conducted in September-October 2021 in the Working Area of the Gilingan Health Center, Surakarta City. As many as 22 people were the sample of the study aged 24-59 months, taking samples using the *purposive sampling method*. They were divided into two groups, 11 people in the pumpkin and papaya seed pudding group and 11 people in the papaya pudding group. The dose of pumpkin and papaya seed pudding and papaya pudding is 100 grams given for 14 days.

The independent variable in this study was giving pumpkin and papaya seed pudding, while the dependent variable was body weight. The research procedure uses an application letter to become a respondent, an explanation letter to become a respondent, a statement of willingness to become a research respondent so that there is no coercion on the respondent. Data collection was carried out by interviews, documentation, and anthropometric measurements. Data analysis used the Paired t- test and the Independent t-test .

This research has obtained an ethical eligibility permit from KEPK ITS PKU Muhammadiyah Surakarta with the *Ethical Clearance number* from KEPK 121E/LPMM/ITS.PKU/IX/2021.

3. RESULTS AND DISCUSSION

a. Characteristics Sample Study

Distribution sample based on age in the group pudding seed pumpkin yellow and papaya and groups pudding pawpaw can seen in the table 1 following This :

Table 2. Distribution Frequency Sample Based on Age

Age (months)	Pudding Pumpkin Seeds + Papaya		Pudding Pawpaw	
	n	%	n	%
24-35	6	54.5	7	63,6
36-47	1	9,1	2	18,2
48-59	4	36,4	2	18,2
Total	11	100.0	11	100.0
$\bar{x} \pm SD$ (bulan)	38.73±11.82		34.36±9.01	

Based on table 2 , shows that age toddler group pudding seed pumpkin yellow and papaya part big aged 24-35 months as many as 5 samples (54.5%) with an average of 38.73 ± 11.82 months and the group pudding pawpaw part big aged 24-35 months as many as 7 samples .

Toddler is group vulnerable society nutrition. In groups the experience cycle needed growth and development substances more nutrition big from group another age so easiest toddler suffer abnormality nutrition (Nurtiana et al , 2017).

b. Type Sex Sample Study

Table 3. Distribution Frequency Sample Based on Type Sex

Type Sex	Pudding Pumpkin Seeds + Papaya		Pudding Pawpaw	
	n	%	n	%
Man	5	45.5	5	45.5
Woman	6	54.5	6	54.5
Total	11	100.0	11	100.0

Based on table 3, shows that type sex toddler second group manifold sex girls in the group pudding seed pumpkin yellow and papaya as many as 6 toddlers (54.5%) and groups pudding pawpaw as many as 6 toddlers (54.4%).

Nutritional status toddler Woman should more tall than boys, because in toddlers women at age mature will experiencing pregnancy. So that when increase heavy body in accordance with increase her age, then risk For experience birth weight _ low birth weight (LBW) to more small

c. Differences in Nutritional Status Toddlers Before and After Giving Pumpkin and Papaya Seed Pudding

Table 5. Differences in Nutritional Status Toddler Before and After Giving Pudding Pumpkin Seeds and Papaya _

Nutritional Status	$\bar{x} \pm SD$ (kg)	p*
Before	-2,293 ±0.32	0.007
After	-1.889 ± 0.47	

** Paired t-test*

Based on Table 5, Wilcoxon test results for nutritional status before and after gift pudding seed pumpkin yellow and papaya obtained value p=0.007 which means There is differences in nutritional status before and after gift pudding seed pumpkin yellow and papaya . Content the zinc present in seed pumpkin yellow as well as the content of vitamin A in papaya can increase lust eat in toddlers nutrition less . Zinc can increase body weight by an increase in circulating insulin like factor growth (IGF-I), lust eat , increase consumption energy and protein. IGF-I is a mediator of growth For promote action hormone growth (Walker et al, 2005).

Content zinc in seeds pumpkin yellow role to enzyme alkaline resulting phosphatase in osteoblasts and delivers savings diaphyseal calcium bone. Alkaline level phosphatase experience decline followed decline zinc in children malnutrition , p This show that deficiency zinc influence activity enzyme alkaline phosphatase (Shakur et al, 2009).

Content the zinc present in seed pumpkin yellow. Zinc works in cofactor enzyme carbonic anhydrase that is helpful enzymes protect cell mucosa mouth from damage and must be smooth function as well as growth cell tasting so that influence growth cells in taste and smell (Imron et al ., 2015). Research conducted in Bangladesh on children show that gift zinc can increase lust eating in children who experience malnutrition status (Sjarif et al , 2011). Inside 100 g of seeds pumpkin yellow contains the mineral zinc of 6.5 mg (Widowati et al , 2008). Zinc plays a role in various reaction , so lack zinc influential to network body , especially in the process of growth (Almatsier , 2009). Zinc can increase body weight by an increase in circulating insulin like factor growth (IGF-I), lust eat , increase consumption energy and protein. IGF-I is a mediator of growth For promote action hormone growth (Walker et al., 2005). Enhancement lust Eat will increase weight and move on will affect nutritional status .

d. Differences in Nutritional Status Toddlers Before and After Giving Papaya Pudding

Table 6. Differences in Toddler Status Before and After Giving Pudding Pawpaw

Nutritional Status	$\bar{x} \pm SD$ (SD)	p*
Before	-2.23±0.28	0.047
After	-2.09±0.354	

** Paired t-test*

Based on the Wilcoxon test results in table 6 are obtained value p=0.047, which means There is differences in nutritional status before and after gift pudding papaya existing vitamin A in fruit pawpaw is compound organic certain required in amount small but essential For reaction metabolism in cell and essential For carry out normal growth and maintenance health . because That body must get vitamins from food For arrange metabolism , converting fats and carbohydrates become energy and help in formation bone and tissue (Fajria and Rika, 2013).

Content fruit papaya which is rich in vitamin A plays a very important role in encourage growth and differentiation network . Vitamin A also prevents keratinization channel digestion so that with consumption of vitamin A will prevent anorexia in children (Rusdiana , 2004). this due to the presence of vitamin A in fruit papaya According to Rusdiana (2004), vitamin A plays a role prevent happening duct keratinization digestion . Vitamin A in enough papaya tall compared to with carrots. Toddler with vitamin A deficiency , then will appear symptom anorexia. Vitamin A content in fruit pawpaw can prevent anorexia and impact to enhancement lust eat. Enhancement lust Eat will increase weight and move on will affect nutritional status.

e. Difference Nutritional Status Toddler S eafter Giving Between the Pumpkin and Papaya Seed Pudding Group and the Group Papaya Pudding

Table 8. Differences in Nutritional Status Toddler After Giving Between Groups Pudding Pumpkin and Papaya Seeds and Groups Pudding Pawpaw

Nutritional Status	$\bar{x} \pm SD$ (SD)	p*
After	-1.889 ± 0.47	0.263
After	-2.09±0.354	

** Independent t test*

Based on table 8, *Independent t* test results of nutritional status after gift between group pudding seed pumpkin yellow and papaya and groups pudding pawpaw obtained the value of p=0.263 means No There is differences in nutritional status after gift between group pudding seed pumpkin yellow and papaya and groups papaya pudding . No exists differences in nutritional status between group caused by each treatment You're welcome give influence on nutritional status before and after get treatment good in groups pudding seed pumpkin yellow and papaya as well as in groups Just papaya pudding .

4. CONCLUSION

There are differences in nutritional status toddlers before and after administration to the pumpkin and papaya seed pudding group (p=0.007) There are differences in nutritional status toddlers before and after administration in the papaya pudding group (p=0.047). There was no difference in nutritional status toddlers after administration between the pumpkin and papaya seed pudding group and the papaya pudding group (p=0.263).

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