

# GROUP OCCUPATIONAL THERAPY IN CHILDREN AFTER AN UPPER LIMB AMPUTATION

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## Abstract

*An occupational therapist is an important member of a rehabilitation team of children after amputation of an upper limb who teaches children to be independent with and without prosthesis. That can be done individually or in groups. At the Institute for Rehabilitation, Republic of Slovenia, two types of group activities are used, cooking and picnics. A questionnaire on the*

*satisfaction with the group activities was sent to all the children and parents visiting our outpatient clinic. All the children and parents who answered our questionnaire were satisfied with both group activities. It can be concluded that both cooking and picnicking are appropriate group activities that may be used in rehabilitation of children after upper limb amputation. Cooking is better for prosthetic training while picnics are more social events.*

## INTRODUCTION

The main rehabilitation goal in children after an upper limb amputation is for them to become independent with and without prosthesis, productive, and to have satisfying lives. An important member of a rehabilitation team treating these children is an occupational therapist who has to teach children how to actively use their prosthesis for play, at school and at other age-appropriate activities, such as bathing, getting dressed, brushing their teeth, and feeding themselves (1), as well as for sport and other hobbies.

Occupation therapy is usually performed individually, but sometimes it can be organized in a group. Individual therapy is more appropriate immediately after the first fitting and after fitting with a new system when the child has to concentrate and follow the instructions. That can be done easier when the child is alone with the therapist and family members only. Later, at follow-ups, group activities can be added, where children and parents meet and see that they are in the same boat as many other parents and children. There are ten different types of groups commonly used in occupational therapy (2): exercise, cooking, tasks, activities of daily living, arts and crafts, self-expression, feelings-oriented discussion, reality-oriented discussion, sensorimotor or sensory integration and educational activities.

At Institute for Rehabilitation in Ljubljana, at the outpatient clinic for rehabilitation of children after an upper limb amputation, cooking and organized picnics are used, where different outdoor games are played.

The aim of the present study was to find out the children's and parent's opinion about the mentioned group activities.

## METHODS AND SUBJECTS

A questionnaire on cooking and picnics were prepared and sent to all (n=24) the children visiting our outpatient clinic for rehabilitation of children after an upper limb amputation.

## RESULTS

Twelve correctly filled in questionnaires were returned, 8 from girls and 4 from boys. The children were 14 years old on average. Ten had trans-radial amputation, 1 partial hand amputation and one trans-humeral amputation. One amputation resulted from an injury, all the others were congenital deficiencies. Two children did not use a prosthesis, 2 used cosmetic and eight myoelectric prostheses.

Ten children were included into cooking activities at least once. Five believed that cooking was a meaningful and seven that it was a very meaningful activity. The two children with a cosmetic prosthesis said that it was not useful, whereas six myoelectric users said that it was partially useful and two that it was very useful for cooking (Table 1). The latter two also used it regularly for cooking at home.

Five children also participated at picnicking at least once. They all believed that it was well organised and most of them would attend it again.

## DISCUSSION

Most children and their parents who answered our questionnaire had been included into group activities at least once and

**Table 1:** Children's opinion about the usefulness of prosthesis for cooking and the meaningfulness of cooking

How useful is prosthesis for cooking?	Cooking is		Together
	Meaningful	Very meaningful	
Not useful	1	1	2
Partially useful	3	3	6
Very useful	0	2	2
<b>Total</b>	<b>4</b>	<b>6</b>	<b>10</b>

all were satisfied with those activities. About half of those who did not answer the questionnaire had not participated at any picnic and many of them were already 18 years old or older. The other half of those who did not answer were younger and were not included into cooking. Most of them had participated at picnics at least once, but they were too young to participate very actively in most group games. Their parents seemed to have decided to participate in picnics mainly to meet other parents.

A group can offer a structure and shape within which we can observe a child and his or her characteristics, find the degree of the child's development, his or her psychic and social abilities, how the child responds to peers, how he or she sees himself or herself and the others, how he or she receives and deals with a large quantity of information and how he or she plans and finds solutions to problems. The two group activities used in this study are very different. Cooking is not appropriate for very young children, but is done with prosthesis and many activities, such as opening different packages (butter, flour, sugar), steering in a bowl, beating/smashing an egg, rolling paste, peeling fruits and many others have to be done bimanually. Children are taught how to use their prosthesis and they can observe other children while doing the same activity.

On the other hand, picnics were organised on a playground. The children went down a slide, used swings, climbed on a jungle gym, played with sand and balls and skipped rope. There was some food served so that they had to open an ice cream, a juice or peel some fruit, but many performed most of those activities without prosthesis. The picnics served more as a social event for spending some time with other children and their parents as well as with rehabilitation team members in an informal setting.

## CONCLUSION

It can be concluded that both cooking and picnics are appropriate group activities that may be used in rehabilitation of children after an upper limb amputation. Cooking is better for prosthetic training whereas picnic is more of a social event. All the children and parents who answered our questionnaire were satisfied with both group activities.

## References:

1. Lake C. Effects of prosthetic training in upper extremity prosthesis use. *J Prosthet Orthot* 1997;9(1): 3-9.
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