



Instituto Politécnico  
de Castelo Branco

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**The changing of the way of feeding from  
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oral intake in child with Costello syndrome**

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Costello syndrome is a rare genetic disorder connected with a mutations in the HRAS gene. In some children with Costello syndrome there are difficulties with breast and oral feeding. It is necessary to begin nutritional therapy by using a enteral nutrition support. The described case is a 13-years old boy diagnosed with Costello syndrome after birth as a newborn. From the beginning he was feeding by using a percutaneous endoscopic gastrostomy (PEG). In 2011, boy started a therapy focused o...

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# The changing of the way of feeding from percutaneous endoscopic gastrostomy (PEG) to oral intake in child with Costello syndrome.

Bachelor Degree in Human Nutrition and Food Quality

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July 2015





# **The changing of the way of feeding from percutaneous endoscopic gastrostomy (PEG) to oral intake in child with Costello syndrome.**

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Internship Report presented to the School of Agriculture of the Polytechnic Institute of Castelo Branco to fulfill the requirements for the Bachelor degree in Human Nutrition and Food Quality performed under the supervision of Doctor Marisa Figueiredo, Nutrition Teacher of the Polytechnic Institute of Castelo Branco.

July 2015



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## **Abstract**

Costello syndrome is a rare genetic disorder connected with a mutations in the HRAS gene. In some children with Costello syndrome there are difficulties with breast and oral feeding. It is necessary to begin nutritional therapy by using a enteral nutrition support. The described case is a 13-years old boy diagnosed with Costello syndrome after birth as a newborn. From the beginning he was feeding by using a percutaneous endoscopic gastrostomy (PEG). In 2011, boy started a therapy focused on stimulation of facial muscles. After 18 months he began to eat by mouth. The percutaneous endoscopic gastrostomy was removed in 2014. The observed results of changing the way of feeding from PEG to oral intake were the increase of height and weight. Presumably it happened because of the difference in quality and quantity of food. It can be believed that the intestinal absorption has been improved and that the more nutrients has been passed to blood and is used to build an organism.

## **Keywords**

Costello syndrome, Genes, Proto-oncogenes, HRAS, PEG.





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