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Shoes



Code adi-vid-01015

Title Shoes

Subtitle Analysis of Products

Description Analysis of products in the Coto Research Center.

Subject Science; Shoes

Duration 00:02:22

URL https://arielweb.com/videos/play/adi-vid-01015

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Label Approved **Privacy** Public

Synopsis

Dr. Gideon Ariel, a computer and technical advisor, discusses the importance of shoes in athletic events. He explains that shoes are crucial as they are the point of contact with the ground, enabling the application of force according to Newton's third law. The design of shoes, including their curvature, thickness, and shock absorption, is critical. Ariel notes that while shoes have improved, there is still a lack of information about their optimal characteristics. He introduces a shoe design that can be inflated for increased shock absorption, but warns that more shock absorption can lead to energy loss. He contrasts this with sprinter shoes, which have no shock absorption to direct all forces towards motion. Ariel predicts that future sports will rely heavily on technology to create the most sophisticated shoes for athletes and the general public.

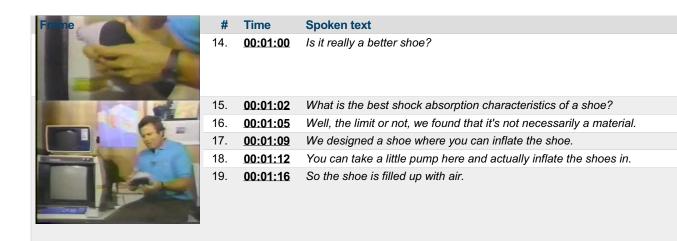
Model Id: gpt-4-0613

Created on: 2023-09-19 00:11:16 Processing time: 00:00:11.5620000

Total tokens: 675

Audio transcription

Frame	#	Time	Spoken text
THE AREL VIEW	0.	00:00:00	Now let's check in with Dr. Gideon Ariel, our computer and technical advisor.
	1.	00:00:04	Taking all athletic events that we analyze here, whether it was the gymnasts, the boxes, the weightlifter, the basketball,
	2.	00:00:11	you always have to use shoes.
	3.	00:00:14	Shoes are very important because that's where you contact with the earth or you contact with the ground.
	4.	00:00:21	You cannot apply force to the body or to the implement if you don't apply to the ground
	5.	00:00:26	because according to Newton's third law, you have an action and reaction parameters.
	6.	00:00:30	In other words, the more you push up, the more the body push down.
	7.	00:00:34	And you have to wear shoes to absorb some of the shock.
	8.	<u>00:00:39</u>	If you take ordinary shoes like that, it's a running shoes, the question is, what is the characteristics of the curvature?
	9.	00:00:46	How thick should it be?
	10.	00:00:48	How much shock absorption it would be?
	11.	00:00:50	According to our research, not too much information was really given to the shoes.
	12.	00:00:55	They are getting better and better.
	13.	00:00:57	But the question is, what is shoe that weigh one ounce less?





ore energy you lose.
sorption at all.
3,7



25.	00.01.39	So for facing, you don't want shock absorption.
26.	00:01:42	For running across the block or around the block, for exercise, maybe you want inflatable shoes.
27.	00:01:47	In some cases in the future, we will design a special shoes.
28.	00:01:51	Here is a sprinter shoe. Look on this wedge here.

What this wedge does, it's contribute to the forces in the sprinting to the third motion.



30.	00:02:01	So this shoe was designed specially with a very special design.
31.	00:02:05	In the future, almost in every event, modern technology will be used.
32.	00:02:11	So Future Sport will be relying on this technology to have the most sophisticated shoes for the athletes
33.	00:02:18	and the most sophisticated shoes for the general public.

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00:01:30 So for racing you don't want shock absorption

Video filename: adi-vid-01015-shoes-256kbps.mp4

29.

00:01:54

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