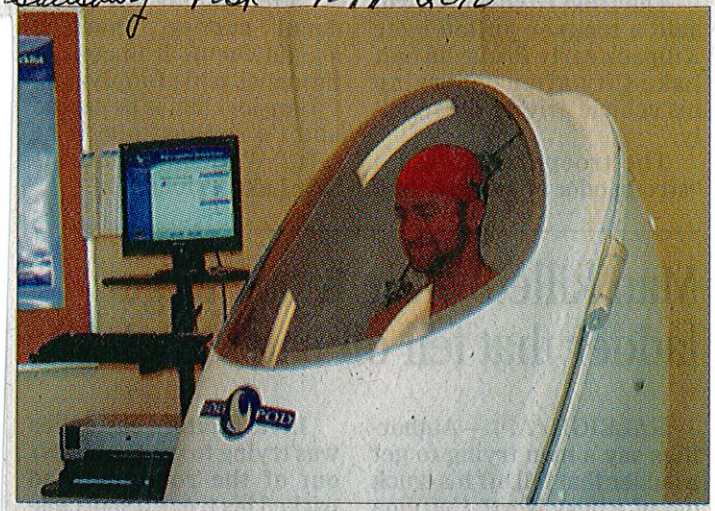
Salisbury Post 1-17-2010



PHOTOS COURTESY OF HENDRICK MOTORSPORTS

Kip Wolfmeier, the rear tire changer for Hendrick Motorsports No. 88 team, sits in the Bod Pod while his body composition is tested at the N.C. Research Campus.

NASCAR teams sharpen competitive edge at NCRC

Research Campus scientists testing Hendrick pit crews for health, performance

By Emily Ford
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KANNAPOLIS — Two NASCAR teams have turned to the N.C. Research Campus to improve pit crew performance through exercise science and nutrition.

Hendrick Motorsports is sending pit crews for the No. 5 and No. 88 teams to the Research Campus in Kannapolis, a $1.5 billion life sciences complex where eight universities study health, nutrition and agriculture.

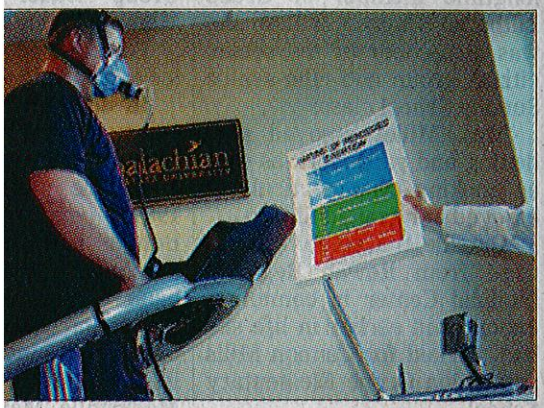
Hendrick has entered what the company calls a "long-term relationship" with Appalachian State University's Human Performance Lab, directed by Dr. David Nieman.

"We are always looking for an edge of opportunity to improve the performance of our pit crews," said Mark Mauldin, pit crew coordinator for Hendrick Motorsports who lives in Salisbury. "Dr. Nieman has expertise in overall fitness and cardiovascular health, and that's an area we don't pursue heavily in our sport."

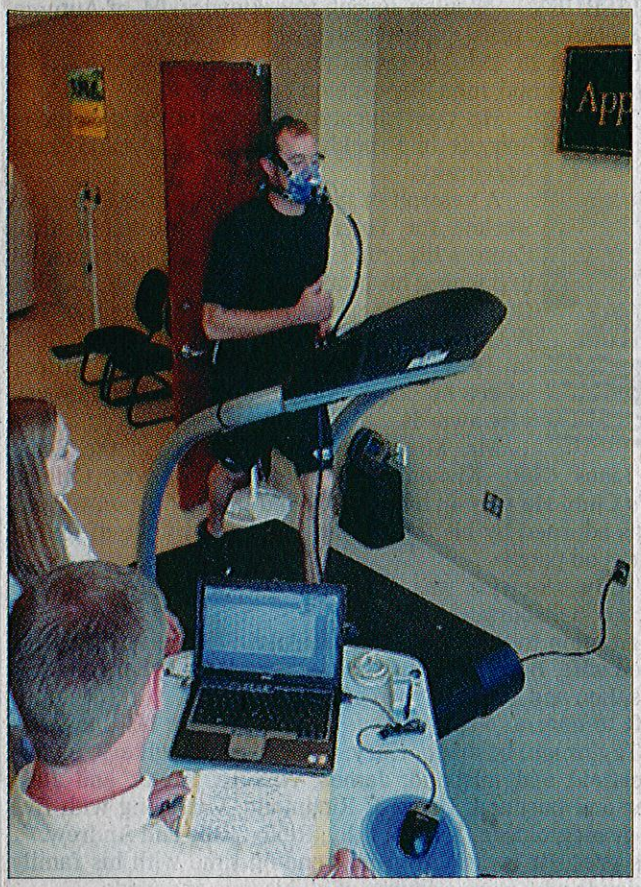
It's possible that drivers Dale Earnhardt Jr. and Mark Martin also will undergo testing at the Research Campus,

See **NASCAR,** 6A

Williams, a rear tire changer for the Hendrick sports No. 5 team, reviews his fitness test re- t the N.C. Research Campus in Kannapolis.



Walker, who provides pit support for the Hen- Motorsports No. 88 team, looks at a perceived on chart during a VO2 max test.



Kip Wolfmeier takes a test to determine his pulmonary efficiency

learned that he needs to lose 20 pounds and decrease his body fat by 15 percent.

"I was shocked," he said.

While the average age in the pit is 26, Jacobs is 33 years old. Normally, he would have about two more years on the jack.

But with Nieman's help, Jacobs said Mauldin believes he could work until he's 38.

Using Nieman's test results, coaches at Hendrick Motorsports have tailored workouts for Jacobs that feature more high-intensity cardiovascular sessions and less time devoted to strength training, he said.

And he's changed his diet.

"Those trips to Cookout? That's been put to a halt," he said. "I am much more aware of what I'm putting in my mouth."

He has a smaller, protein-based breakfast, eats his largest meal at midday and tries not to consume anything after 6 p.m.

Jacobs is committed to improving his health and fitness for his employer as well as for his two children.

Unless he loses weight and body fat, his risk for cancer, diabetes and other chronic health conditions is doubled, he said.

"I want to be around for them," he said.

Mauldin first learned about the Research Campus last year when he attended a meeting at the biotechnology complex in downtown Kannapolis.

As a cattle farmer, Mauldin serves on the N.C. Department of Agriculture & Consumer Services Board. When state Agriculture Commissioner Steve Troxler gave a tour of the campus, Mauldin started asking about a human performance lab.

Clyde Higgs, campus vice president for business development, put him in touch with Nieman.

As NASCAR prepares to open its season on Valentine's Day at the Daytona 500, two pit crews from Hendrick Motorsports are meeting with scientists in Kannapolis to improve their performance by even a tenth of a second.

"The premium is now put on human performance that was always put on car performance," Mauldin said. "You need to build great pit crews, as well as great cars, to win races."

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MARK MAULDIN
rew coordinator for Hendrick Motorsports

and suspension parts, pit crew ıg has become a specialty part ng," Mauldin said.

le Hendrick has a state-of-the- ining facility, the company the specialized equipment at search Campus, which pro- lata that Mauldin can't gener- his own.

And Hendrick lacked the expertise of Nieman, a renowned scientist and researcher.

When pit crew members were undergoing testing last week in Kannapolis, Rick Hendrick's personal trainer Matt Skeen thought Nieman's name sounded familiar.

Skeen later realized that Nieman wrote one of his college textbooks, "Exercise Testing and Prescription: A Health Related Approach."

So, one cutting-edge industry turns to another as Hendrick looks to the Research Campus to get the edge on the competition. And Nieman said he relishes the chance to work with pit crews, a little-studied segment of the athletic population.

The arrangement is free.

In Kannapolis, the men are undergoing fitness testing, analysis and nutrition counseling. They will return every three to four months to determine if they've met benchmarks that Mauldin and Nieman will set based on test results.

Nieman has developed cardiovascular training regimens to improve the crews' overall health and endurance, which should result in better performance in the pits and reduce fatigue, he said.

"A leaner guy will be able to hang in there longer," he said.

In general, Nieman wants to improve the men's aerobic capacity and body composition.

That's important not only to improve performance in any athletic endeavor but also to improve an athlete's health he said.

The testing and consultation sessions have already made a difference, Mauldin said.

"It was a real eye-opener for me," said Mark Jacobs, the jack man for the No. 88 car. "It definitely made me realize that for what I do and the age that I am, I need to be in a lot better shape."

To reach his full potential, Jacobs