

At 81 years old, TeGroen is a

Pioneer still on the move

JOSH HESTER
Staff Writer

At 81-years old, Newburg's Elizabeth TeGroen has lived a life others should envy, spending her whole life doing what she loves — researching esophageal cancer.

Now in her later years, TeGroen will mix business with pleasure when she heads to China in April.

"I'll be going to China as part of a tour package," she said. "That's the only place I've never been where there are occurrences of the disease. So hopefully I'll get some information while I'm there."

At the age of 4, TeGroen, decided she wanted to study medicine, not knowing she would become a pioneer in cancer research.

"I told my parents I wanted to go into medicine and they always said I'd get married before I had a chance to go to school," she said.

In 1949, she graduated from Witwatersrand University as a doctor.

The next few years would see her start a family with her late husband Loet before becoming interested in the research of esophageal cancer — a rare form of cancer.

TeGroen's research began in South Africa.

"I was working at a pathology lab in East London, South Africa, and we kept getting cases of esophageal cancer," she said. "It was only supposed to be 2 percent of all cancers."

TeGroen contacted a radiologist who confirmed her findings at the hospital and she began researching the history

of the cases.

"I began looking at the cases and in 1945 cases started to increase - there was a burst of the disease," she said. "We found that the cases were congregated in various places of the city."

TeGroen said that the cases seemed to follow activities of the local bootleggers.

As TeGroen and her team began to investigate they found that the beer had been made in barrels containing tar and other additives.

Unfortunately, the problems did not stop there.

"We found high occurrences in the Transkei - a native territory about the size of Denmark, 16,444 square miles," she said.

The doctor would eventually compile research statistics that found people from the southern regions had a higher occurrence of the disease. The cause was linked to a deficiency of trace minerals such as zinc.

Years later the leader of the research team, Dr. Rex Burrell, died and TeGroen was tapped to head the continuance of the research.

"I was an orthopaedic surgeon at the time and I didn't want this work to go to waste," she said. "I resigned from my job and took over the research."

Funded by a grant from the National Institutes of Health, in Bethesda, Md., TeGroen began an epidemiological survey that found poor nutrition was the cause of the disease.

TeGroen said in areas where the people were living off of one staple food,

JOSH HESTER/RDN PHOTO

papers regarding esophageal cancer research. It nutrition could be linked to cancer.

SEE TEGROEN, 2A

TeGroen planning trip to China, hopes to write book

CONTINUED FROM PAGE 1

such as corn or wheat - which are incomplete foods - there was a higher incidence.

In the outlying areas where people ate a variety of foods, there was a lower incidence, if any at all.

"I went to the NIH with this new theory that linked nutrition to the cancer," she said. "They looked at me like I was some dumb woman from Africa."

During this time period, TeGroen recalled, most people were still working under the premise that something causes cancer, noting the book *Waterbabies*.

At the time, her theory linking nutrition and cancer was revolutionary.

Looking back, TeGroen laughed saying, "Two or three years later the NIH came out with all of this information that poor nutrition could lead to cancer."

Although older, TeGroen's mind is still sharp as she described the bonding processes between proteins and nitrates - creating nitrozamines - and how they can cause cancer when the levels are high.

"The people who lived in the coastal areas and eating foods like guava were getting a lot of vitamin C," she said. "Now we're finding that vitamin C is an antioxidant and bonds with the proteins."

She noted that this keeps nitroamine levels low.

"Your nutrition will determine your immunity," she stated.

TeGroen and her husband retired in 1981, built a yacht and sailed for three years. As far as her research goes, she's pleased with the results.

"I'm quite happy because I feel a lot of what we're hearing today came from my coming and saying something [to the NIH]," she said. "We started a new thought process on the causation of cancer."

During her researching years, TeGroen found time to have five children, which she took on research trips from time to time.

"I would take two or three at a time," she said laughingly. "This would give them prime time with mom."

TeGroen's travels took her all over the world. She's been to Iran twice, Curacao, Kenya, as well as throughout Africa and Europe.

Still with all of this under her belt, TeGroen is not finished yet.

"I've promised myself I would finish a book on herbal medicines this year," she said.

TeGroen is also working with the Revitalization of Newburg committee which is in the process of buying the Houston House. When purchased and renovated, she would like to see a museum opened there.

"I have too much to do," she said. "I don't have time to die."

Emerson support

CONTINUED FROM PAGE 1

most members of Congress to serve the public.

"There are a few bad apples in the bushel," she said in her weekly address. "They can come from

(573) 364-5050 or 1
603 Kingshighway, R

Each Office is Independently O

JUST LISTED



THE PAINT IS STILL WET!

Builder is putting the finishing touches on this quality 3 BR, 2 BA home with over 1400 sq. ft. and a full basement. Many upgrading materials, great location and a beautiful front porch. CALL LINDA TO SEE #9-7484! \$148,900

BACK ON THE MARKET



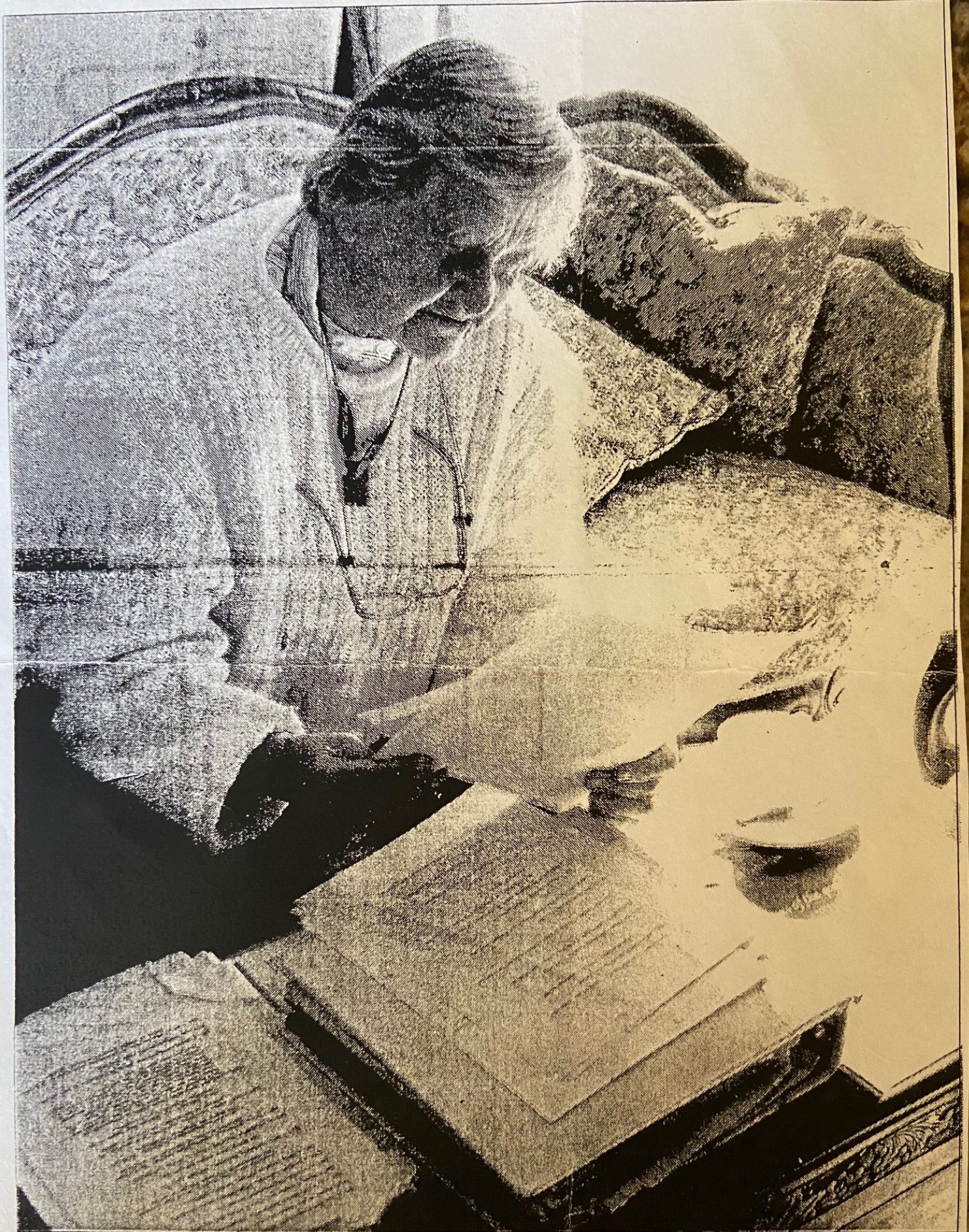
COUNTRY LIVING

3 BR, 1.5 BA home on 5 ACRES M/L with a pond south of Rolla. Land is fenced and has huge blackberry patch. See this gem for yourself--#9-7212 IS ONLY \$89,900!

For more detail

SAM

S



JOSH HESTER/RDN PHOTO

Elizabeth TeGroen, of Newburg, looks through some of her papers regarding esophageal cancer research. At 81 years old, she was a pioneer in her field, suggesting that nutrition could be linked to cancer.