JOHN GROSS can certainly hold his own when it comes to the field of structural engineering.

Currently a research structural engineer in the Structures Group of the Materials and Structural Systems Division of the Engineering Laboratory (EL) at the National Institute of Standards and Technology (NIST), Gross has designed steel pressure vessels for Pittsburgh-Des Moines Steel Co.; taught both undergraduate and graduate courses in structural engineering and conducted research in the area of analysis of partially erected structures at the University of Colorado, Boulder; participated in the ASCE and NIST World Trade Center Investigations and a study of the collapse of the Dallas Cowboys Indoor Practice Facility and of L' Ambiance Plaza; and performed research on the 1994 Northridge earthquake that resulted in AISC Steel Design Guide 12—Modification of Existing Steel Welded Moment Frame Connections for Seismic Resistance. And that's just the tip of the iceberg.

Gross can also hold his own in the kitchen. Cooking is his passion, and he applies himself just as much there as he does in his professional role—although it wasn't always that way. At first, it was simply a matter of practicality. “I wouldn’t say I had an interest in cooking, per se,” Gross recalls. “It was part of what we needed to do to get to the next day and get the kids fed.”

But after his divorce, all that changed. Gross opted out of the typical bachelor survivalist diet. “I decided I wasn’t going to have a freezer stacked full of TV dinners and little boxes of half-eaten Chinese carryout in the fridge,” he says. “I decided that I would put together fresh meals that I could eat every day. I’d look in my fridge to see what I needed, then walk to the grocery store just a block away.”

This desire to put together “real” meals for himself on a daily basis has grown into a habit of accumulating quality cookware, perfecting recipes and hosting dinner parties. Of course, the practicality he learned as an engineer carries over to his cooking habits to this day. He tries out new recipes to see how well they work before deciding whether to prepare them for his friends and family. For large gatherings, he prefers to prepare food ahead of time so when the party starts, the oven is off and he doesn’t have to manage guests and cooking at the same time. For more intimate affairs, he will often engage his guests in the cooking process.

“I was a happy assistant to the chef one day,” says Charlie Carter, AISC’s vice president and chief structural engineer, of his experience at one of Gross’ dinner parties. “My culinary skills are on the order of PB&J and jars of spaghetti sauce, but John was a great manager—plus he handled all the difficult parts. The meal was as enjoyable as the company.”

Gross measures ingredients and temperatures precisely. In short, he cooks and entertains as you would expect an engineer to. This approach puts him on opposite ends of the cooking spectrum from his daughter, Emily, whom he describes as an excellent cook and who is able to take more of an instinctive approach to preparing meals. “I drive her crazy because I’m an engineer,” he explains. “I measure precisely, take the temperature of the meat, etc., and she doesn’t do that. I’m the one who’s convinced that cooking is actually a science, that you put certain ingredients in for a particular reason and certain amounts in for particular results—and she produces wonderful meals without even looking at the cookbook. We have a good time cooking together.”

And good times are what a task that Gross once viewed as a chore has evolved into. His dinner parties have become a way for him to share a passion that, perhaps unlike structural engineering, most people can relate to: getting together with friends for an outstanding, well-thought-out meal. And while again, he still takes somewhat of an engineer’s practical approach to his meal preparation, his gatherings have forced him to embrace a more impromptu philosophy—at least when it comes to seating.

“I’ve had up to 16 guests for dinner,” he says. “It would be called a sit-down dinner if you didn’t care what you were sitting on. When I serve that size party, I go buffet-style and people might sit on the sofa or chair… something designed for sitting.”