



No animals are harmed in the biomeat's production, although it can't be considered vegetarian | Photo source [KFC](#)

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## 3D-PRINTED CHICKEN NUGGETS HEAD INTO THE MAINSTREAM



**KFC is working with a Russian bio-printing firm that uses animal cells to create meat with the same microelements as real meat, without additives or hormones**

**Spotted:** Craving a chicken nugget but worried about animal welfare? How about a printed nugget? KFC is partnering with Russian bio-printing firm Bioprinting Solutions to create 3D-printed chicken meat. The project aims to create a laboratory-produced chicken nugget that looks and tastes like the real thing but is more environmentally friendly to produce than ordinary meat.

Bioprinting Solutions will provide the technology and know-how to print the chicken, while KFC is providing its proprietary ingredients, such as breeding and spices, to produce an end product with the signature KFC taste. The technology uses animal cells to create meat with the same microelements as real meat, without the additives or hormones often found in farm-raised birds. Consequently, no animals are harmed in the biomeat's production, although it can't be considered vegetarian.

According to a study by the American Environmental Science & Technology Journal, growing or printing meat from cells uses around half the energy of raising the animals in nature. It also ensures much lower greenhouse gas emissions and land use. KFC has said that the "crafted meat products" could be the next step in the development of a "restaurant of the future" concept.

There has been increasing interest in using 3D bioprinting technology to produce ethical meat. [According to Yusef Khesuani](#), co-founder and Managing Partner of 3D Bioprinting Solutions, the use of such technology, "will allow us to make 3D-printed meat products more accessible and we are hoping that the technology created as a result of our cooperation with KFC will help accelerate the launch of cell-based meat products on the market."

Food is just the latest product to be produced by 3D printing. New innovations in the technology are developing rapidly. At Springwise, some recent advances we have covered include printing [concrete](#) for use in construction and a 3D-printed [rocket engine](#).

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Email: [info@bioprinting.ru](mailto:info@bioprinting.ru)

Website: [bioprinting.ru/en](http://bioprinting.ru/en)

### **Takeaway:**

Two big hurdles for the process will be speed and cost: 3D bioprinting is currently too slow and too costly a process to use for fast food. However, there have been promising developments in medical bioprinting, and unlike in medicine, the nuggets don't have function -- they just have to be safe and taste like chicken. KFC is working to place itself at the forefront of trends in alternative "meats". Last year, the company became the first US fast-food chain to test out Beyond Meat's plant-based chicken product. KFC expects the nuggets to be ready for testing this Autumn.