Barcelona — Physicians and other health care workers should use clinical consultations to identify all individuals at high risk of developing type 2 diabetes, according to an International Diabetes Federation (IDF) consensus statement released at an international congress on prediabetes and metabolic syndrome. Speaking at a press conference to mark the report’s launch, Dr. Paul Zimmet, director of the International Diabetes Institute, Melbourne, stressed that renewed advocacy is needed to combat worldwide projected increases in diabetes, which he labeled “the largest and fastest-growing disease epidemic in history.” Since the 1980s, the number of people with diabetes has grown threefold. With 246 million people with diabetes now and 380 million people with diabetes [predicted] by 2025, diabetes is set to bankrupt national economies,” warned Dr. Zimmet. And if numbers of people with impaired glucose tolerance, or prediabetes, are added to that sum, the at-risk population swells to 800 million by 2021, he said.

The IDF consensus recommends a two-pronged approach to prevention aimed at halting the rise in diabetes and associated conditions, targeting both at-risk individuals and the whole population. Central to the high-risk approach is to identify the target group, explained Dr. George Alberti, senior research fellow at Imperial College, London, who, as author of the IDF statement. However, he said, this is “difficult because so many people won’t have any obvious signs.”

The one external feature that does indicate high risk of diabetes is waist measurement. “The easiest way for most people is to look at their feet,” Dr. Alberti said. The IDF suggests that this method should be the main one used by resource-poor countries to identify at-risk populations, but physicians can also use validated questionnaires to assess risk status.

Once suspicion of risk is identified, explained Dr. Alberti, physicians should then measure blood glucose in their patients to identify existing undiagnosed metabolic syndrome or diabetes. This group can then be targeted with interventions to induce lifestyle changes and increase weight loss. “It is easy. Eat less and walk more,” Dr. Alberti said. Population-wide efforts need to focus on national plans, he added. Governments must support the idea of healthy lifestyle education in schools, encouraging people to walk around more, and learning on the food industry to act responsibly when it comes to advertising its products. However, he said, nongovernmental organizations and charities have an important role to play in raising awareness of the issue.

It is about getting the [nongovernmental organizations] and the diabetes organizations to keep prodding away at the government. The key is repetitive action,” he said. “There is no point in saying something once to politicians; you have to say it over and over again.

The IDF calls for all countries to adopt national diabetes prevention plans that bring together strategies for prevention, secondary prevention, and treatment of diabetes as associated disorders. Stressing that healthy environments are key to achieving population-wide behavior change, Dr. Jean-Claude Mbanya, president-elect of the IDF and vice dean of the faculty of medicine and biomedical sciences, University of Yaounde, Cameroon, said a key feature of these plans should be collaboration between all government sectors, including health, education, sports, and agriculture.

Avi Friedman, Ph.D., professor of architecture at McGill University, Montreal, who supports the IDF call for a broad view on health improvement, said, “Inadvertently, our own government authorities may have contributed to this epidemic by allowing developers to create urban social problems... Urban sprawls are part and parcel of new developments without proper attention to building design, sidewalks, bike paths, public transport corridors, playing fields, and friendly exercise areas that are essential and need to be accessible to people who want to maintain a healthy lifestyle.”

The Juvenile Diabetes Research Foundation is currently enrolling patients to participate in the second phase of the Ranibizumab for Edema of the Macula in Diabetes (READ-2) study. Supported by Genentech Inc. and the nonprofit U.S.-based JDRF, the study is designed to test the long-term safety and effectiveness of intracocular injections of ranibizumab in patients with diabetic macular edema. In this phase II study, researchers also would like to compare the results of ranibizumab injection with laser photocoagulation, the standard treatment of diabetic macular edema, according to a statement issued by the foundation.

The researchers want to enroll 126 participants in this multicenter clinical trial, age 18 and older with macular edema as a result of type 1 or type 2 diabetes. The study will consist of a 2-week screening period, a 6-month treatment period, and an 18-month follow-up and treatment period. In a phase I study, Dr. Quan Dong Nguyen, Dr. Peter A. Campochiaro, and their colleagues found that ranibizumab was successful in improving visual acuity at 7 months. There were no adverse events related to ranibizumab, although some patients did experience redness on the surface of the eye at the injection site that lasted up to 72 hours. The cause of the redness was more likely caused by the injection and not by the drug itself, the investigators said.

Genentech manufactures ranibizumab, which is used to treat patients with wet age-related macular degeneration. The drug blocks a growth factor thought to be involved in the formation of abnormal blood vessels that cause the loss of vision in diabetic macular edema patients.

Ranibizumab was approved by the Food and Drug Administration in June 2006. The phase I trial, which began in December 2006, took place at the Wilmer Eye Institute at Johns Hopkins University, Baltimore. Phase II will take place at the Phoenix-based Retinal Consultants of Arizona. The expected completion date of the phase II study is January 2009.

For additional study and participation information, clinicaltrials.gov/ ct/show/NCT00407381? order=14

—Lorinda Bullock

Second Phase of READ-2 Macular Edema Study to Begin